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ABSTRACT

Excerpts from transcripts of sessions at the Institute on Innovations in Undergraduate Education, attended by 32 faculty and administrators representing 10 colleges and universities, are presented. Practitioners discuss their observations and experiences in innovation programs, led by staff members of the University of Michigan's Center for the Study of Higher Education. Topics covered include: organizational theory and practice (four approaches to the study of innovation; future responsiveness and needs of the present; and case studies of change in two small liberal arts colleges); students and faculty; external programs at the University of Pittsburgh, the University of New Hampshire, and Lone Mountain College. The outlook for the future is also discussed. (LBH)

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STRUCTURE AND EMERGENCE

Proceedings of an Institute on Innovations in Undergraduate Education

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Center for the Study of Higher Education
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1976

STRUCTURE AND EMERGENCE

Proceedings of an Institute on Innovations
in Undergraduate Education

edited by

Zelda F. Gamson
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Ann Arbor, Michigan

September 1976

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PREFACE

The Institute on Innovations in Undergraduate Education was held in Ann Arbor, Michigan on May 19-23, 1975. Thirty-two faculty and administrators represented ten colleges and universities scattered across the country from New Hampshire to California. The Institute was supported by a grant from the Eli Lilly Endowment. The Center for the Study of Higher Education, University of Michigan hosted the Institute and has consented to publish this distillation of what occurred during a sunny spring week in Ann Arbor.

The following pages are excerpted from several hundred pages of transcriptions of sessions in which practitioners talked about their observations and experiences in innovative programs. Staff from the Center for the Study of Higher Education led these discussions and attempted to place them into a more general framework.

This publication is directed primarily to practitioners--faculty members, administrators, students and others--who wish to learn from the concrete experiences of people who have attempted to do things differently and from those who have studied the process of innovation. It is devoted, secondarily, to students of innovation. Both audiences will find rich materials and insights into innovation in higher education from "the ground up".

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PROBLEM AND GOALS OF THE INSTITUTE

Since World War II, college and university enrollments have grown at a staggering rate as access to the academy evolved from elite to mass to what is now practically universal access. The undergraduate experience became a mandatory rite of passage to white collar employment and the good life. In the 1960's the civil rights movement, the Vietnam conflict, Ralph Nader, Rachel Carson, the race to put a man on the moon, emerging ethnic consciousness, and a host of other factors were reflected on campuses across the country as students voiced cries for "relevance".

Responding to these demands often proved quite traumatic for colleges and universities. Relying on a curious blend of cherished academic values and astute pragmatic judgment, colleges and universities answered demands for relevance with reforms designed to give individual students greater control over educational decisions. Experimental units were established. Grading and graduation requirements were modified (even abolished in a few institutions), and opportunities for independent study were created. Recently, colleges and universities have given new meaning to the commitment to mass education as they have sought to attract increasing numbers of "nontraditional" students. New academic and supportive service programs specifically tailored to the demands and needs of various new student populations have been implemented.

While some institutions elected to finance these changes internally, sources outside the academy provided financial support for many of these innovations. For example, the Fund for the Improvement of Postsecondary Education, in its first year, funded many programs promising new approaches for meeting the needs of minorities, women, older people, and rural people. In the last few years, competency-based programs in which students strive to master a specific set of clearly-stated educational outcomes have received considerable attention. Institutions now seem to be responding to students' utilitarian concerns, to pressures from state legislatures for objective measures of productivity, and to the requirements of business, government and industry for specific skills. The willingness of the government and private funding sources to provide financial support to colleges and universities for innovative programs has been a primary catalyst for many institutions to analyze their goals, missions, and practices. Through this process of externally stimulated self-renewal, many institutions established exciting environments which supported diverse modes and directions of learning.

Although great inventiveness and sophistication have gone into the development of these new programs and their implementation has weathered the filtering process of academic decision-making, institutions have rarely shown much concern with the institutionalization and diffusion of innovations once they have been introduced. Many new programs have come and gone--dying of neglect, isolation, drift or conflict--only to be reinvented, funded, and implemented in other places at other times. Often they are guided by the same set of imperatives and fueled with the same degree of enthusiasm as similar ventures which have been forgotten or were never known. Some innovative programs have even reappeared at institutions where they had withered or floundered only a few years before.

What indication is there that today's innovations will escape this same cycle of experimentation to stagnation? As institutions go hurtling toward their replacements, it is clear that precious little has been learned from the successes and failures of earlier reforms in higher education. Today's innovators operate primarily on intuition, educational jargon to the contrary, and pay scant attention to peers who only a few years ago started from similar analyses of higher education in formulating and implementing their own innovations. Must we keep reinventing the wheel? Or can we learn from history, from theory, from each other?

The Institute on Innovations attempted in a modest way to deal with these questions by bringing faculty members and administrators who have been involved in innovative programs in institutions across the country together with faculty and researchers at the University of Michigan who have studied and taught subjects related to change in higher education. The questions addressed by the Institute, in varying degrees of explicitness, were as follows:

1. What have the participants concretely learned about their particular innovations and about the processes of innovation at their institutions--with respect to organizational context, faculty, administrators, students?

2. Are there some general principles underlying particular ways of introducing and implementing innovations?

3. How have the innovations been institutionalized?

4. What were the roles of external models of innovation and funding sources in the initiation, implementation and institutionalization of innovation?

5. How can the knowledge gained about the particular innovations and the way they were initiated, implemented and institutionalized be diffused to other innovators around the country?

6. What assumptions do we make about the future of higher education, and what agenda should we set for ourselves and our institutions in the light of future possibilities?

Participants

Institutions were selected on the basis of two criteria: (1) that the program for which the institution was chosen involve a fairly major investment of institutional resources, in the form of time, money, and personnel; and (2) that the program required some important structural modification within that institution.

In consultation with an administrative officer at each college and university, individual participants were selected according to the following unusual criteria: that one representative be the person who was most responsible for the initiation of the innovation; that one have been responsible for the implementation of the program; and that one have been an informed critic of the innovation. These three roles were selected because of the recognition that: (1) Initiation and implementation of a new program quite often are separated; a president or vice-president, for example, will initiate an innovation, but not see it through implementation. (2) The initiation stage seems to require different sorts of people and to present different kinds of problems than the implementation stage. (3) This separation of initiators from implementors is an important source of strain and difficulty within many institutions.

A serious critic of the program was invited because innovators often misjudge the extent of support (or opposition) for their programs. Critics provide important checks and balances for innovators, although the work environment in most colleges and universities rarely allows for sustained and honest interaction between innovators and their Establishing opportunities for dialogue between innovators and their critics in a neutral environment seemed a way of enriching understanding of the organizational and interpersonal constraints facing innovators, as well as allowing for the exploration of some of the moral and ethical questions underlying particular innovations.

After a complex process of exploring hundreds of colleges and universities with innovative programs of one sort or another, a total of 31 participants from ten institutions attended the Institute. These people represented colleges and universities of varying size, control

and prestige. The mix of institutions and programs included three very different programs for adults, two urban and one rural; a small Catholic women's college and a small college in Appalachia which have introduced major curricular and structural changes; a cluster college in a private university and a branch of the University of California organized into a series of cluster colleges; two small private liberal arts colleges and a large all-purpose state university in the Midwest.

The participants were faculty representing a mixture of fields, and administrators with a variety of responsibilities. They were experienced people, sophisticated in the ways of their institutions and accustomed to having to work with others to accomplish their goals. Almost all of the faculty participants had some administrative experience. The participants were, in all, both doers and thinkers. And they were articulate and candid about what they wanted and did not want, what they gained and did not gain, from their week in Ann Arbor.

Formal presentations were planned around the following topics: Theories of Innovation, Personal and Organizational Context for Innovation, Organizational Theory and The Role of the Administrator in Innovation, The Role of Faculty in Innovation, The Role of the Student in Innovation, and The Role of External Stimuli in Innovation. Editing of the transcripts from these sessions has tried to capture the flavor of the exchanges. Having deleted rambling and repetition, what remains is a faithful rendering of the actual discussions.

INTRODUCTION
Joseph P. Cosand

Joseph Cosand set the tone for the Institute by leading a discussion about what the higher education community should be doing in the second half of this decade. From his experience as a college president, member of numerous national commissions, Deputy Commissioner for Higher Education in the U.S. Office of Education, and Director of the Center for the Study of Higher Education, Cosand painted a broad picture of the external stimuli acting upon higher education. He talked about some of the things colleges and universities would have to do in the future to remain vital and alive.

If an institution really wants to change it must commit itself to change; it must believe in change. Only then will the organization be able to withstand administrators, faculty, or trustees who wittingly or unwittingly subvert change. The institution must be prepared to support change. For instance, how many of your institutions provide encouragement and opportunities for faculty to get together informally, to get to know one another as individuals? We did that at a small community college in California when I was its president and those meetings did so much for the morale of the faculty. Everyone learned about the whole person--not just his/her academic interest in chemistry, medieval English, and so on.

Secondly, how many of your institutions budget for creativity? I don't mean using soft money to spawn innovation, but actually using internal resources. When I was president of the Junior College District in St. Louis we budgeted two percent of our budget for creativity. Faculty members and administrators applied for grants to develop new curricula and other special projects. When financial stringencies occurred (and they occur always) the faculty attitude was always, "Let's not touch that two percent." Every institution needs such a resource bank to support new teaching methods and other innovations. Admittedly, most of the innovations we funded involved one or possibly two faculty

members at a time, but I don't see any reason why the concept couldn't be expanded to encompass innovations which touched the institution more directly. We can't wait for innovations to happen. Rather, we must structure and maintain a climate for creativity where innovations and innovators are nurtured. It takes hard institutional dollars—not soft foundation money—to do this right.

Institutions cannot always control their destinies. I learned in Washington, D.C. that the key decisions which affect higher educational institutions are often made by faceless people. You hear the words of senators and congressmen, but in general their comments are composed by their aides. The posture of the administration is decided upon by a small coterie of individuals. People in higher education could have significant input into these decisions but, overcome with arrogance, we feel we are above mingling with the politicians. Politicians, their aides, and the bureaucrats in the Office of Education control the flow of resources into our institutions. They control financial aid for students, bonding for classroom buildings and dormitories, funds for research, and so on. We cannot continue to ignore their power and control over our institutional destinies.

Higher education is now approaching another period of upheaval and change which some analysts have called the "steady state". While the last thirty years have been characterized by burgeoning enrollments, the steady state will be characterized by plateauing or declining enrollments. Frankly, I find this a misnomer, for certainly, postsecondary education during the 70's and 80's will be anything but steady. There will be a continuing period of dynamic change in most institutions if they are to cope successfully with enrollment problems, financial stress, management concerns, state and federal intrusions and controls, student diversity and student expectations, faculty tenure, collective bargaining, and few, if any, positions for young minority or women faculty members. I think that is something

we have not wanted to face. Clark Kerr has said it will probably be the year 2000 before minorities and women are represented in colleges and universities in proportions commensurate with their percentages in the population as a whole. The issues are urgent and demand our best thinking, planning, implementing, and evaluation.

Will higher education be able to weather these forces? I am sure you will agree with me that the answer lies in the degree to which institutions will open themselves up to learn from themselves, other institutions, and the environment that surrounds them. (Don Michael will talk more about this institutional learning posture.) The ability and willingness to seize upon new and better ideas, whether they be teaching methods, certification structures, organizational forms, even organizational purposes, seems to be a critical requirement for institutional survival. I am certainly not advocating that institutions become chameleons, capable of changing their form and prupose in step with changes in the environment. That kind of institutional pandering is repulsive. Rather, I am saying that institutions should be sensitive to the forces of societal change. They should be able to respond to those societal changes which will affect their institution's vitality.

Let me say a few words about education commissions. Their reports and recommendations do affect your institutions, and therefore I think it's important that faculty and administrators be knowledgeable about what the various commissions are recommending. Having said that, and before you rush off to read the Carnegie, Newman, Meyerson, Education Commission of the States, and the score of other reports, I want to speak some words of caution.

The problems that you have with a commission or with processing innovative actions on your own campus are similar: Why was it formed? Who took the initiative? What's the hidden agenda? Who authorized it? Who receives the report? Will the report be made public? Will it

achieve visibility? Will it create discussion, evaluation and action? Who financed it? What are the implications of the financing of innovations on your campuses? Who appointed the members and how were they selected? What is the status of the members? What is the age of the members? What is the breadth of background? What is their male/female, minority/non-minority mix? Is the membership respected? Turning to innovation practices on your own campuses, who made up the nucleus of the group you are working with? How were they appointed? Do you have a real cross-section of your faculty? Do you have prestigious people from your faculty as well as new, enthusiastic, young faculty members?

These questions need to be asked and resolved before our institutions will be able to change holistically. Closer integration with the environment is needed, and that integration is only going to occur in an atmosphere of trust and understanding. The murkiness and interpersonal jealousies must be dissipated before institutions can reach their potential. We must assume leadership and responsibility for setting our own priorities and processes for innovation in the seventies.

ORGANIZATIONAL THEORY AND PRACTICE

Zelda Gamson, Donald Michael, Marvin Peterson, and Everett Rogers

The corpus of literature on organizational change is quite large, but the connection between those theories, which were developed primarily from studies in business and industry, and higher education organizations have always been rather tenuous. On the first day of the Institute, Zelda Gamson and Everett Rogers presented participants with thumbnail sketches of four frames of reference for understanding organizational change, approaches participants might find helpful in interpreting their own institutional experiences. The next morning, Donald Michael presented an outline of behaviors required for individuals and organizations to develop skills for monitoring and anticipating the environment, to become future responsive. Marvin Peterson then asked participants from Lone Mountain and Franconia to relate the changes at their respective institutions to Michael's suggested behaviors for future responsiveness. Institute participants were not the first people to discover that the content of organizational change theories is indeed abstract. Participants had to reach deep within themselves to relate their institutional practices and their other personal experiences to these theories.

Four Approaches to the Study of Innovation

Introduction--Zelda Gamson:

One of the objectives of the Institute is to investigate the possible connections between theories about how organizations change--particularly institutions of higher education--and your experiences with initiating and implementing innovative programs at your institutions. We really know very little about change in institutions of higher education. Organizational change theories have been constructed primarily from the study of business and community service organizations, although much of the literature on the theory of planned change does report on the spread of innovation through K-12 systems. As a first try at this objective, Everett Rogers and I will briefly summarize the assumptions of four approaches to change in organizations. We ask that you pay particular attention to the relevance (or lack of it) of your experiences

at your institution to each of the four theories. At what points are your experiences at variance with each of them? Which approach best aligns with your experiences? If you had to do it all over again, what do the models tell you that you should have done differently?

Each approach views the organization and organizational change from a different perspective. Despite their claims about being value-free, there are norms and value premises implicit in each of them. They speak to different levels of the organization—one focuses primarily on individuals (diffusion), two focus on the total organization (complex organization and conflict), and one focuses on subgroups (planned change). They speak to different stages in the innovation process, and conceive of this process in a variety of ways. I should warn you that Everett Rogers and I are going to present them in a fairly abstract, telegraphic way. Our sessions in the next days will be building on what we start now, with Donald Michael leading a discussion on organizational change at a more concrete level and Marvin Peterson commenting on presentations some of you will be making on the varied role of the administrator in the innovation process.

Complex Organization Approach--Zelda Gamson

The way of understanding organizational change that has been most fully developed by sociologists such as Etzioni, Katz and Kahn, Hage and Aiken, and others* has been the complex organization approach to

*See Amitai Etzioni, A Comparative Analysis of Complex Organizations, New York: Free Press, 1975.

Daniel Katz and Robert Kahn, The Social Psychology of Organizations, New York: Wiley, 1966.

Jerald Hage and Michael Aiken, Social Change in Complex Organizations, New York: Random House, 1970.

James March, (ed.) Handbook of Organizations, Chicago: Rand McNally, 1965.

Gerald Zaltman, Robert Duncan and Jonny Holbek, Innovations in Organizations, New York: Wiley, 1973.

change which emphasizes, obviously, not personality and not attitudes, but social structures. Particular attention is given to roles, power, communication systems, resources, and coordination among roles. One corollary is that the achievement of stated, intentional goals may not be what one ends up with once the process gets going; instead, other less-articulated and less-anticipated outcomes may result. Organizations are "open" in the sense that they are conceived as being related to the environment and can only be understood in terms of their relationships to the environment. They make exchanges with the environment and these exchanges will affect in different ways what happens internally. "System" implies an interrelationship of parts, so that if you change one thing you are likely to be affecting other things. What comes out of this is a view of organizational change that seems to me essentially conservative: it sees a strain toward equilibrium, a balancing between internal integrity, internal functions, goal orientations, and external pressures.

Most theorists in the complex organization tradition stress the fact that change occurs mostly because of environmental pressures. It is very unusual, especially in colleges and universities, for the impetus for change to come from within. Therefore, in doing an analysis of a particular organization or in trying to achieve a "seat of the pants" kind of understanding of your own place, this approach sends you looking at the degrees and types of environmental connections between the organization and the <u>outside world</u>. This is particularly important in higher education because colleges and universities do not generate their own resources to the degree that other kinds of organizations do. We are very responsive to demographic changes; we are very dependent, if we are public universities, on the economic situation in our states. And no matter whether we are public or private, we are very much related to the national economy.

However, one can overstate the case. Surely, institutions vary in the degree and range of responses to similar external stimuli. Some colleges have responded to changes in student career-interests by getting rid of general education requirements; others have introduced skill-oriented career programs; others have integrated career-concerns with general education; still others have not yet acknowledged, let alone responded to, changes in student interests. In other words, the reaction to external forces depends on the internal structure. Currently, some of the most creative work is going into understanding the organizational characteristics that seem to promote or impede innovation in colleges and universities.

So, given pressures for change and given the fact that the impetus for change may come from the external environment, there is variation in response. The question is: What factors are associated with responses that we would term "innovative"? One set of answers builds on a view of what Burns and Stalker, in their classic study of industrial firms in Great Britain, termed "dynamic organizations", organizations in which there is a great deal of complexity and diversity of roles, expertise, knowledge, training, and values.* Decision-making in a dynamic organization is decentralized and participative. There are problems in applying the notion of decentralization to colleges and universities which I will address later. Another variable is the degree of formalization or codification of rules. Low codification and formalization are thought to provide an environment which encourages creativity which in turn spawns innovation. There are other organizational characteristics that combine to produce what is called the dynamic organization. For me, the most important characteristic is diversity (sometimes called complexity), especially of knowledge and external ties. Diversity produces the conditions for responsiveness to the environment.

*Tom Burns and G.M. Stalker, The Management of Innovation, London: Tavistock Publications, 1961.

It is important to emphasize that this list of variables has nothing to do with organizational goals. These variables are essentially contentless. We are talking neither about ideology nor about consensus or dissensus. Organizational theorists have been arguing for a long time about a goals approach versus a structural or resource approach to understanding organizations. The latter pays attention to how resourses are allocated, which tells you a lot more about organizational goals than formal statements of purpose or attitude surveys. In practical terms the complex organization theorists urge paying close attention to the task structure in organizations—how work is allocated and how resources are distributed.* If you want to accomplish a particular change, don't get people focused on goals and values. Instead, change the organization of work, the definition of task and the actual enactment of jobs. Then worry about goals. I am sure all of you have had discussions not unlike this at your institutions: Which way should we go? Should we define what we want to do first and then specify the operations? Or do we fall into the operations first and then, out of that, see what the goals are? The complex organization theorists say: forget about organizational goals; if we're really interested in change, deal with the task structure. The complex organization theorists tend to be most relevant to the initiation stage of an innovation rather than to its implementation. They are really talking about what kinds of arrangements of people help organizations respond quickly and adaptively to environmental change. That question is most clearly focused at the level of the initiation, or proposing, of new programs and structures.

*See, for example, William Starbuck, "Organizational Growth and Development", in James March (ed.) Handbook of Organizations, Chicago: Rand McNally, 1965.

There is a paradox here which James Q. Wilson has called a major organizational dilemma.* The characteristics that are supposedly most important in producing innovative initiatives in complex organizations--diversity, decentralization, low formalization--are also the very ones that hold back the implementation of these multiple initiatives.

Let me give an example. A decentralized organization is usually more able to generate many proposals and ideas for innovation, but it has a hard time reaching agreement and mobilizing the resources and energies required to implement these proposals and ideas. A more centralized organization does not generate many new proposals (at least not from below), but, should it do so, it can move faster to make them operational. Stated in a very simplified way, those systems that are best at initiating innovations do not have the organizational structure to implement them. Those systems that are good at implementing innovations do not have the organizational structure that most encourages the flexibility and creativity required for starting new things. This dilemma, by the way, is very familiar at the individual level. We all know people personally, and have many historic examples of figures who have been great initiators, but who cannot really see something through or who get bored with the details of implementation. Then there are individuals who are talented translators and practitioners of other people's new ideas. Organizations, like people, which combine both sets of qualities are rare indeed.

What is missing from the complex organization approach to innovation? First, these theorists tend to be ahistorical. They do not attend to the history and traditions of particular organizations in

*James Q. Wilson, "Innovation in Organization: Notes Toward a Theory", in James D. Thompson (ed.), Organizational Design and Research: Approaches to Organizational Design, Pittsburgh: University of Pittsburgh Press, 1965.

trying to explain innovativeness at any point. Second, as I have indicated already, they deny the importance of organizational goals in shaping change. Third, related to this point, is the downplaying of attitudes--of leaders, of rank-and-file members. Fourth, the notion of stages, of take-off points, of timing are almost entirely absent. Yet we know that innovation has a life-cycle. Stages are crucial to understanding the process of innovation.

The diffusion approach to the study of innovation pays particular attention to the life-cycle of innovations.

The Diffusion Approach - Everett Rogers:

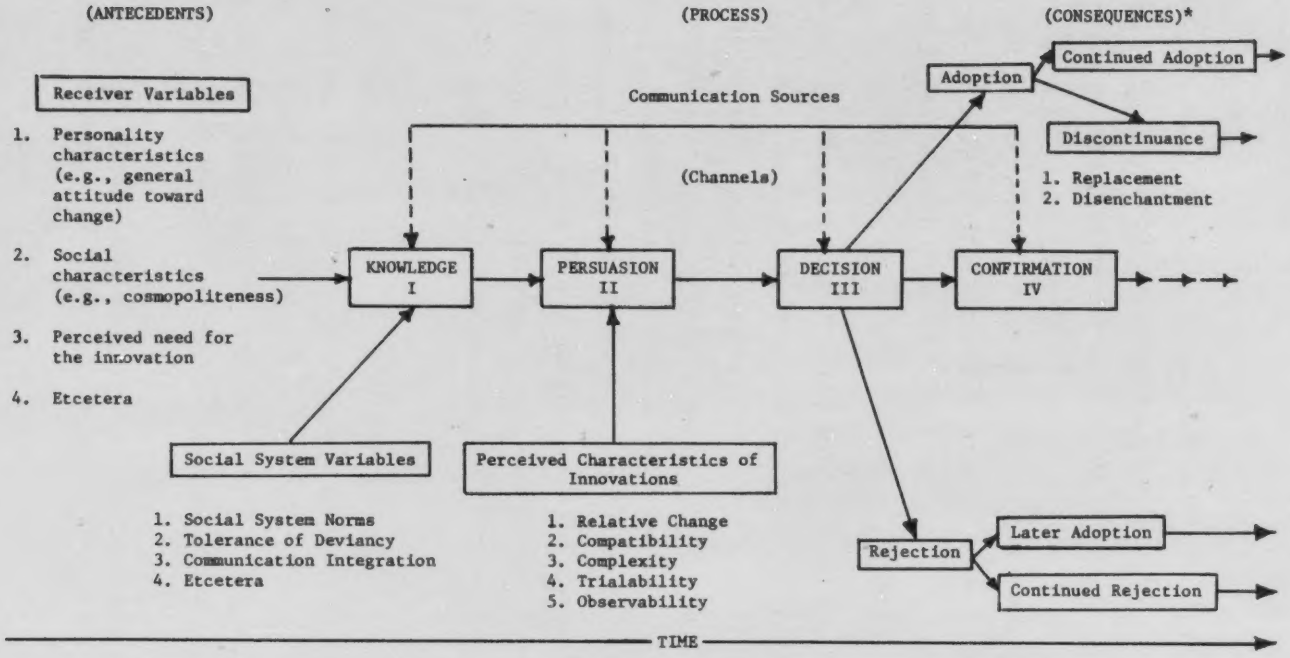
Studies of the diffusion of innovation focus on a variety of innovations from hybrid corn to team teaching to living-learning dormitories. An innovation usually is defined as an idea perceived as new by the individuals involved. So while the use of colored chalk may not be an innovation to you, it is an innovation to us here at the University of Michigan.

In the usual diffusion study, an innovation is studied as it spreads over time to potential adopters. For instance, we might study a new educational idea as it spreads among schools. There have been several hundred such diffusion studies, usually in public education and not at the university level. You all have probably heard this finding: Fifty years are required for an innovation to go from first use to widespread use in public schools. And it is true that some of our older innovations did take fifty years, which is another way of saying that the average public school is likely to be 25 years behind the best approved practice. In more recent times, the 1960's, we find that these diffusion curves are much steeper; for instance, it only took five years to go from the beginning to the end of the diffusion of modern math.

In every study of the diffusion of innovations there are four central elements. One is the character of the innovation; this is the focus of attention rather than the organizational structure as in the complex organization approach. The second key element is time. These studies almost always look at how an innovation spreads among people or organizations through time. This means we look at stages which are not invariant but which occur regularly when people are exposed to an innovation. Different theorists have different names for the various stages in the innovation-decision process. Generally, there is agreement that the elements should include an awareness stage, an evaluation stage, and a decision stage. I have added a fourth element, which I call the confirmation stage, which follows the decision to adopt or reject an innovation. (The following figure presents a paradigm of the innovation-decision process.)

Diffusion over time, cumulated across a population of people, tends to follow a beautiful S-shaped curve quite regularly, and that regularity makes diffusion scholars like me very happy. We have even named it. We call it the "diffusion effect" based on the increasing amount of influence on people as the rate of knowledge and spread or rejection of a particular innovation moves through a social system. Although the research on diffusion looks very technical, in fact the results are based on the very social nature of diffusion. The progress of innovations among people and organizations depends on the degree and type of interaction among them. The individual characteristics of potential adopters of innovations are very important. We have learned that certain kinds of people in the population regularly adopt new things early, while other kinds of people adopt late or not at all.

Figure 1
Paradigm of the innovation-decision process.



*For the sake of simplicity we have not shown the consequences of the innovation in this paradigm but only the consequences of the process.

Source: Everett Rogers and F. Floyd Shoemaker, The Communication of Innovation, New York: Free Press, 1971.

The third element is the communication channels which link the individuals or schools or units of whatever kind that are adopting at each of several time periods. The process is like dropping a pebble in a pool and watching the ripples move outward. The fourth element in a diffusion study is the social system through which the innovation spreads. If we are talking about all universities or all university professors in the United States, that is our system. If we are talking about the diffusion of the steelaxe among the Arunta tribe in Australia, those aborigines are the system.

There has been a wide variety of diffusion studies.* The only problem with them is that they almost entirely focus on the individual. The Iowa farmers in the hybrid-corn-diffusion research were individuals. They were also, in a sense, farm firms, but they were treated as individuals. In education there were studies about how innovations spread among teachers, as if they didn't work in schools or in universities. Diffusion researchers increasingly are coming to understand that you cannot ignore the school's or university's influence on a faculty member when you study that professor's receptivity to a particular innovation.

This year I have been doing a study of the spread of four undergraduate teaching innovations among individual college teachers in the United States. In studying the way these innovations spread, I learned that many characteristics of the individual faculty members were important: young faculty members are more receptive to trying

*These are summarized in Everett Rogers and F. Floyd Shoemaker, The Communication of Innovation, New York: Free Press, 1971.

out innovations, as are faculty members located in small colleges rather than large universities. At research, graduate-oriented universities, there is little reward for improving undergraduate teaching. A typical faculty member in such an institution would be a bit foolish to use an undergraduate teaching innovation that would detract from his/her record of scholarly publication. Adopters of the undergraduate teaching innovations I am studying are located overwhelmingly in smaller undergraduate institutions where improvements in undergraduate teaching are rewarded. The effect of the organizational structure on individual decisions about innovations can no longer be overlooked.

There are innovations that can be adopted by individuals and there are innovations that can only be adopted by organizations. When the unit of decision is an organization, it becomes a much more complicated affair because many individuals are usually involved. Of course, innovations are carried out by individuals, but the element of chance complicates the picture. There is no question that there are many things we do in colleges and universities that must go through a collective process of decision-making. An example: many colleges and universities have adopted a program of independent study in recent years. Now the actual use of such a program is at the individual level; an individual faculty member may or may not choose to work with a student on an independent study project. But the decision to open the independent study option in the first place is usually taken collectively by the faculty. This is a typical kind of innovation which involves a process of deliberation leading to an affirmative or negative decision. If the decision is affirmative, the actual doing of it is left up to individuals and is not mandated or forced upon them. Nor do such changes require a great deal of coordination with others, or complex paraphernalia.

A less typical example of a more collective implementation would be the formation of a new department or program. Such an innovation requires collective decision to initiate and a collective process to implement. An individual cannot decide to "do" a department. There is a rule of thumb here, which says that everything being equal, the individual-level innovation decisions are adopted faster than collective decisions. When an innovation involves an organizational change, the decision process is generally much slower because many people and many interests must be taken into account.

Throughout my remarks I did not intend to imply that innovation is good and non-innovation is bad. I think, today at least, we do not assume that all innovation is always good for everybody. Almost any innovation may have some benefits for somebody, and almost every innovation may have bad effects on someone else. That is why studies of diffusion end up looking at both adoption or rejection; it is equally important to study both. Many innovations, in fact, probably should not be adopted by everybody, and the sensible course is to prevent them from being adopted. There is a lot more to innovation than simply assuming there ought to be more of it. There ought to be more of it for some people under some conditions. The question is, what are those conditions?

The Conflict Approach - Zelda Gamson

The focus on decision-making, coordination and multiple interest groups brings us directly to the conflict approach to innovation. This approach emphasizes, first, the inherent costliness of innovation, particularly at the organization level. Costliness is to be understood not only with respect to resources but also with respect to goals, values, and perceptions of the institution. People fight real and symbolic battles over the meanings of a particular innovation

for their own roles and conceptions of what their institutions ought to be. This means that almost any proposal that must go through a collective-decision process both produces and operates through differences within an organization. This is particularly true for a complex university which operates, in some ways, like Congress--where multiple interests must be balanced and satisfied before agreement on any particular proposal can be reached.

Colleges and universities are curious hybrid organizations that are bureaucratic in some respects and democratic-professional in others.* So in our enterprise, we get a concatenation of interests within a very peculiar kind of organization which has intangible products, intangible incentives, and intangible criteria for evaluating performance. Such conditions are ripe for the development of conflict, particularly when proposals for innovation come along.

The conflict approach alerts us to what seemingly innocent proposals may do to an organization. The diffusion approach is highly developed in terms of cumulative research on the adoption of innovation by individuals, but the models are regrettably sanitized. In fact, innovation (and even the diffusion of simple technological devices at the individual level) is never simple. What appears to be quite straightforward to the proponents of an "obviously" good

*See J. Victor Baldridge's study of New York University for a good exposition of the conflict approach to studying innovation (Power and Conflict in the University). See also Ernest House, The Politics of Educational Innovation, Berkeley, Calif.: McCutchan, 1974 and Ronald G. Corwin, Reform and Organizational Survival, New York: Wiley, 1973.

Peter Blau, writing from the complex organization tradition, attempts to trace out the bureaucratic vs. professional elements in 115 colleges and universities in The Organization of Academic Work, New York, Wiley, 1973.

Talcott Parsons and Gerald Platt grapple with similar questions in The American University. Cambridge, Mass.: Harvard University Press, 1973.

thing suddenly runs into a whole gauntlet of constraints and reactions.* If this is so, then it is important for the analyst and practitioner of innovation to pay close attention to existing interest groups and to the likely responsiveness of different organizational sectors to innovative proposals.

The conflict approach, in contrast to the complex organization approach, looks directly at the implementation process. Under a conflict view, an organization can be seen as a system of constraints, with which any proposal for change must deal at some point or another. If you do not deal with those constraints at the beginning, they will come back to nag you later. A recent Ph.D. from the Center for the Study of Higher Education, Clifton Conrad, traced the process whereby four institutions adopted changes in general education requirements in the late sixties.** Two of them started considering changes via ad hoc committees, two via standing curriculum committees. Carefully documenting the changes in the proposal from its initial state to final adoption, Conrad found that the ad hoc committees started out with more wide-ranging, thoroughgoing proposals than the standing committees. Eventually, the proposals had to confront the objections of standing committees or faculty bodies, so that by the time the adoption stage was reached the original proposal was drastically whittled down. The standing

*Donald Schon takes a political view of diffusion in Beyond the Stable State, New York: W.W. Norton, 1971. See especially Chapter 4.

**Clifton Conrad, "Toward a Theory of Academic Change", Dissertation, Center for the Study of Higher Education, University of Michigan, Ann Arbor, Michigan, 1975.

curriculum committee method started out with a more modest proposal which was better able to endure the attrition and compromise processes found along the ad hoc committee route.

The conflict approach helps us to understand these forces by directing our attention to the processes of policy formulation and later to the political compromises required for implementation of an innovative proposal. Unlike the three other approaches we are looking at, the conflict approach deals directly with the distribution of power and interest differences. It recognizes that formal authority is always limited, particularly in colleges and universities, by informal pressure and ties. Bargaining, influence, and compromise are more important than coercion in understanding the process of change (although the ultimate power to coerce is always in the background). Proponents for innovation will be more or less successful to the extent that they recognize and are able to mobilize the political process in their institutions. Administrators obviously have greater control over this process than faculty as a group although longtime, influential faculty members in institutions with a history of faculty influence, can activate the political process beyond administrators' wildest dreams.

Here are some questions vital to understanding the political approach: Do the proponents of innovations have or do they know who has formal authority over the area of innovation proposal? Who has informal authority? Do the formal and informal authority structures match? Where are the interstices between the two? What are the interest groups relevant to a particular issue among students, faculty and administrators? How do these interest groups interact? What are their different values and life-styles? What is the process whereby interest groups exert influence on decision-making? What

coalitions tend to form? Which coalitions are possible and which impossible? Who states formal policy? How does policy typically get implemented and routinized?*

The end product of most proposals for innovations in higher education come about through this kind of negotiated order. In the histories of the innovations represented at this Institute I doubt that there is one that did not entail some degree of conflict; in some cases, I am sure there was a great deal. This is not to imply that the innovations or the institutions are bad or poorly managed. It is simply the way with most innovations which require a collective decision, and we might as well face it, accept it, and learn to live with it.

This is a fact of life which people working in the planned change tradition are just beginning to recognize.

*See David Riesman and Verne Stadtman, Academic Transformation: Seventeen Institutions Under Pressure, New York: McGraw-Hill, 1973, for a series of case studies of institutional change during the sixties which are amenable to these kinds of questions. Joseph Fashing and Stephen Deutsch offer another set of case studies for the same period in Academics in Retreat, Albuquerque, New Mexico: University of New Mexico Press, 1971.

Planned Change - Everett Rogers

There are many traditions covered by the planned change model: The human relations school, organizational development, research and development, and others. I cannot possibly cover all of these but I urge you to consult some of the "Bibles" in these fields as they have been applied in education: Ronald Havelock's literature review and application of planned change strategies; Bennis, Benne and Chin's reader; and Miles' reader.*

The whole idea of planned change arose as a reaction against the prevailing thinking about management and administration. As you perhaps know, the French word from which we take the word "administration" implies stability. Our principles of educational administration of business management all imply a nonchanging structure. One of the functions of social structure or organizational structure is to give continuity and stability. However, the viewpoint of planned change is that most managers or leaders of organizations have to manage change as well as stability. In education today that is a very important issue.

*Cf., Ronald Havelock, Planning for Innovation Through Dissemination and Utilization of Knowledge, Ann Arbor, Michigan: Institute for Social Research, The University of Michigan, 1971 and Ronald Havelock, A Grade to Innovation in Education, Ann Arbor, Michigan: Institute for Social Research, The University of Michigan, 1970.

Warren G. Bennis, Kenneth D. Benne and Robert Chin, (eds.) The Planning of Change, New York: Holt, Rinehart and Winston, 1969.

Matthew Miles (ed.), Innovation in Education, New York: Columbia Teachers College, 1964.

Most conceptions of planned change specify three components: the client or user or customer in need of expertise or resources, the source of expertise or resources, and the linkage-system between a user and a resource. In the usual conception of planned change there is a process over time, which can be broken down into several segments. The process begins with a client expressing some kind of need to some kind of resource, that is, there is an exchange between a question-asker and an answer-giver about a problem to be solved. Sometimes the resource can be a formal agency devoted to the storage and dissemination of information, such as the Center for Research on Learning and Teaching at the University of Michigan. Sometimes the resource is an individual, a vice president or provost, with certain resources for bringing about educational change--special monies, special knowledge, or special methodological tools that can analyse the situation, perhaps calling for innovation or for new alternatives. The next step is the answer to the need expressed by a user. These answers are often new alternatives that the client was not previously equipped to adopt or to consider, or simply did not know about. The third step is the feedback on how well or poorly the response fits the problem. This stage opens the possibility for the expression of another need, and another cycle of the entire planned change process begins anew.

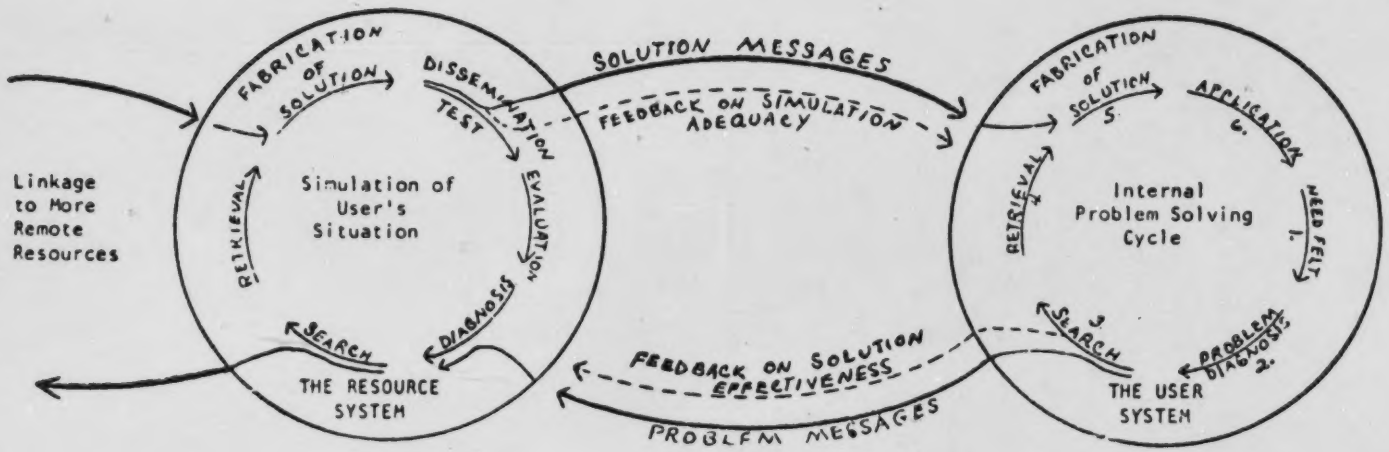
Much of the thinking of many of the people who have made models of planned change has been influenced somewhat by the success of the Agricultural Extension Service. Farmers felt certain needs for information. They expressed these needs to the Agricultural Extension Service agents, who tried to provide answers and evaluate how effectively the needs were being met. The cycle continues. This case has

been generalized to any kind of expert source or resource who may or may not be in the same organization as the user. These models all put a heavy emphasis on the process of linkage, on the system and the individuals involved in communicating needs to possible answer givers, the answers given, and the reactions to the answers. This general model is what Ronald Havelock calls "the linkage process". He looks at this process as a way of seeing how needs on the part of users get connected to resources, how various solutions to problems get processed and used. (The following chart from Havelock's work, Planning for Innovation, summarizes the linkage process and the stages involved in planned change, for the user and the resource.)

Planned change advocates insist that rather than simply letting change happen, we ought to plan change so that it happens in an appropriate way. This may take the form of a person or office whose job it is to encourage and plan innovative responses to problems in the institution. It may take the form of regular workshops for faculty, administrators, students. It may make use of outside expertise. It may employ all sorts of formal and informal ways of collecting and applying data about students, about performance of the institution, about the desires and strengths of faculty and administration. It is an attempt to control, and make rational and deliberate, what goes on anyway.

I suppose one could even plan for spontaneity and uncertainty. The line of argument that is usually followed by various people working in planned change is that because our organizations operate in changing environments, they need to change. It follows, then, that we ought to form ways of organizing ourselves that would encourage such responsiveness.

FIGURE 2. The Linkage Process



From the Linkage Perspective:

1. Resource system must recapitulate or adequately simulate the user's problem-solving process.
2. The user must be able to understand (and simulate) the research, development, and evaluation processes employed by the resource system in the fabrication of solutions.
3. Resource and user must provide reciprocal feedback.
4. Successful kinkage experiences build channels for efficient dissemination.

Source: Ronald Havelock, Planning for Innovation Through the Dissemination and Utilization of Knowledge, Ann Arbor, Michigan: Institute for Social Research, The University of Michigan, 1971.

Future Responsiveness and the Press of the Present - Donald Michael

I sense a tension between two states of mind, a problem innovators always have. The tension is between the rewards and punishments that go with the doing of the activity and the rewards and punishments of being in on the historical verdict regarding the change after the fact. Both activities preoccupy innovators.

Much of the time the dominant activities are focused in the rewards and punishments of doing. In the doing are the nagging questions: Will it work? Will we look back on it and think it worked? Will it have appeared to have been worthwhile? Could we have done something else? This objectivity, this standing off from the doing, is something that people who see themselves as innovators feel obligated to engage in. But they find very little time to do it.

The setting for these types of preoccupations becomes critical for planning innovations that are responsive to possible futures for organizations in higher education. This is the question I want to address.

1. Four Delicate Balances

The problem of balancing time, dollars, and human involvement at both the personal and institutional levels never seems to resolve itself. One aspect has to do with how to balance the need to build goal clarity versus the need to build moods, coalitions, enthusiasm, and receptivity to change. Sometimes these two work together--sometimes not. The question is how to balance your energies.

A second balancing has to do with the application of formal theory about innovations with raw hunches about what to do. We now

have a fairly useful body of formal knowledge about organizational behavior in general and about organizational behavior in relation to innovation in particular. We do have a corpus of theory and knowledge about the process of planning itself; about implementation, evaluation, monitoring, diffusion and the like. While that formal theory is seldom used, there is a feeling that it ought to be. Again, the problem is the balance between taking the time, making the careful, thoughtful assessment of what should be used from that corpus of theory, versus operating on hunch, on intuition, on past experience--operating "by the seat of our pants". Please understand that I am not at all deprecating hunch. I am saying that a tension exists. It is an issue for innovation planning that becomes terribly important when resources are tight or when the demands for accountability are strong.

A third category of balance is reflected in the pull between structure and emergence. How much do you get organized by way of content and procedure--this refers partly to the goal-clarity issue--and how much do you let yourself experience, go with, flow with, and discover as you go? When do you say, "Hey wait! Let's tighten this up!" Or, "Hey wait! Let's loosen this up!" This balance between structure and emergence is clearly one that always needs attention.

The balance of task versus process with regard to the task is the fourth source of tension I observe. It is the old argument of: "Let's get on with the job" versus "Wait a minute! We can't do the job well unless we understand what's happening to us in the process of getting on with the job." Another facet of the issue is balancing participation when it works and when it doesn't work. When does it work as

a substantive contribution? When does it work as a process contribution? When is it counterproductive? Who should participate? How do you find out? How do you take the time and dollars and energy to find out?

Related to task versus process is the persistent underlying issue in any group of task-orientation versus sentient group-orientation. (The word "sentient" comes from English research on group process. It has to do with the function of the group as social support for members as persons in contrast to evaluating them as positive or negative contributors to task accomplishment.) The task group approach is: "Let's leave all personality out of this and deal with the issue, with the facts." Well, you can't. The way people feel about each other influences the group action, too. The support function is necessary especially in risky situations. Groups are particularly important for innovators, who are usually operating in a beleaguered state.

2. Monitoring the Environment

The second general category has to do with problems of monitoring the environment in order to anticipate and change it. "Anticipate" has a kind of passive, reactive sense of attending to the environment: What's going to happen out there that I'm going to have to respond to? "Monitoring" has a proactive sense about it: What can I make happen out there that will provide a context for increasing the likelihood of our innovation working? "Out there" comes through in terms of loss or gain of student interest or faculty interest, or a loss or gain of dollars and other institutional support. In other words, the problem of monitoring is the problem of finding the resources, the time, and the commitment for keeping track of the broader environmental context which surrounds the innovation. What's happening to student interest?

We know that our society is in the midst of vast normative changes. Whatever education may mean to you and to others, it is not stagnant. It is in the throes of change, perhaps venturing in new realms, perhaps attempting to duplicate what used to be one place or another, but changing nevertheless. Monitoring becomes critical under these conditions. The increase or decrease in enthusiasm for an innovation might have very little to do with the innovation per se. It may have much more to do with the ideas in good currency that have bubbled up elsewhere during the period of the innovation, for example, ideas about the purposes and nature of education as reflected in the reports of the various national commissions in commencement speeches, or in the changing patterns of public and private funding. By the very fact of our being innovators, we are all subject to an enormous flux of ideas. We are particularly open to them, or we would not be innovators. The reading of those currents of definition about the nature of the educative process and the purposes of education becomes a critical monitoring activity.

3. Planning for Failure

Not all declines signal that the innovation has been a failure. Decline may simply be part of the natural history of the innovation. But then there really is failure. Can we plan for it? Aside from special efforts like the NASA mission or building the atomic bomb during World War II, organizations are not accustomed to planning in terms of: What if this doesn't work? What are the costs and benefits of its not working? Can we do contingency planning? If this particular form does not work, can we plan innovations, branching off the first one, that might work? How will we know if it is not working?

These questions require thinking ahead. They require making the costly effort to do contingency planning, to be structured, but not at the total cost of emergence; simply enough structure so that if the emerging activities do not seem to be working, there will be a deliberate capability to go in other programmatic directions and no need to withdraw in disarray.

There is another aspect of contingency planning around innovation failure that I'd like to draw to your attention. For want of a better description, I will call it the "Phoenix Process" in innovation. One of you referred to an innovation "crashing and burning". What was learned from sifting ashes? What can the organization and the innovators learn from the crash and wreckage about the process of innovating that can be applied to future innovative efforts? If an innovation declines, what happens to the organization that was unanticipated, favorable as well as unfavorable? My guess is that in this turbulent world the productive consequences of failure and decline need to be more clearly identified.

4. Organizational Learning Capacity

The final thread is the need to build and maintain an organizational learning capability which is not limited to the innovation but permeates the organization itself. How do we build a capability into the organization for self-consciously examining what it is doing as it's doing it? How do we build a capacity for self-consciously continuing to take the time afterward, for not being content with the occasional one-shot evaluation? The organization needs to learn both from its efforts at innovating and from its efforts at not innovating.

Discussion

Gary Woditsch: I am concerned about organizational learning. In my experience it has been a holy grail. Let me illustrate through one brief story to show what concerns me.

I witnessed a person direct a project at a major university with tremendous success for a period of twelve years. It was an outstanding honors program. Then he went on to greener pastures. When he left, the question arose: How much of the unique quality of that program would remain after he departed from the institution? The ex-director said that none of it would. He was completely pessimistic about the organization's capacity to internalize what he perceived as largely characteristic of his personality and power and his own aspirations for the organization's behavior. That is a dismal kind of load to bear. I am very disheartened if what we can expect from our efforts as innovators in organizations is that organizations are responsive only so long as we are pushing against their rather passive, mindless ways and that when we leave, organizations will no longer be responsive to the issues we raised.

This story raises a fundamental question about the utility of engaging in administrative or innovative activities in an organization. I have seen "macro" level efforts to get organizations to change in fundamental ways. I am not very convinced that those were very productive. I wonder what is an optimal way to get an organization to become sensitive to new areas of its functions as a result of an innovator's work?

Donald Michael: The attitude of the director of the honors program that Gary Woditsch describes is the antithesis of what is required for organizational learning. What are behaviors which help insure organizational learning? I can provide some indicators. If a leader is successful in a particular way, if he is accomplishing something and wants the organization to be able to do it, then he has to put a

major effort into teaching others. A very special effort must be made to open up that hat so others can see the mechanism that produces the rabbit, and special arrangements must be made for others to practice producing the rabbit.

The obvious response is that in a lot of cases leaders do not care to take the time to teach others. In that case, then, do not wait for leaders to develop the will and the skill to teach. Organization members who are interested in developing the learning capability of their organization should insist on systematically and continuously debriefing and observing leaders in operation. The organization must become independent of the leader in order to survive. It must learn to be its own teacher.

The changing role of the organizational consultant reflects the growing belief that organizations which have built-in learning capabilities are much better off than those which do not. Whether out of ignorance, indifference or deliberate intent, consultants used to operate in an organization so that when they left, the organization would chronically be in need of their help. Increasingly that practice is considered unethical. Today, the first task of a consultant going in is to say, "Look, a major continuing task for me in my work with you is to make me an unnecessary appendage."

Comment: What theories are applicable in this process of learning?

Donald Michael: There is a fair amount of useful theory about the way coalitions are built and how conflict operates and what is constructive and destructive about both. We are learning how to operate so that the likelihood of getting a constructive payoff from conflict is increased. We know some very useful things about how organizations design themselves to protect themselves from turbulent environments. We know also what must be done to assure that organizations not protect themselves from the turbulence which they ought to be using to inform their learning.

A reasonable amount of theory also exists about the interplay between dissension and task processes in small groups which tells us how to help people learn to recognize those interplays and use them constructively. We know some very useful things about the interdependence of roles in a group and what happens if those roles are out-of-phase or, in some cases, absent. The necessary reciprocal roles may be absent. If they are, what can be done? How can groups become self-conscious about reciprocal roles? How can group members learn to work to overcome the absence of role interplay?

We know a fair bit about designing task forces and about contingency planning. We also know that, just as many leaders are not operating out of care for the organization, many innovators and groups in organizations (ostensibly there to develop the organization) are not operating out of care for the organization, but instead, out of self-protective motives. We know enough now to begin to help groups recognize and face up to this weakness.

As innovators, I am sure you sense the set of behaviors you and your working groups must adopt in order to protect yourself and your ability to stay open. You have personal needs and the group has needs. Both sets must be satisfied. You protect yourself by having two kinds of groups working with you. One is an "accountability" group, an idea which comes from the radical/advocate planning movement. This is a group whose job is to keep you aware of the ethics of what you are doing. The other group is a task-oriented group to help you stay responsive and open to the reasons and means for making the innovation.

This way, you are less likely under pressure to become dogmatic and to forget a lot of what you know. Standard crisis behavior narrows the appreciation of the options available. Learned successful behavior takes the place of instinct for human beings. Given the choice, most of us would choose what worked before. But what worked before is unlikely to work now. If your group is not effectively

designed to avoid this behavior, then it will tend as a group to narrow down its performance.

Increasingly we are faced with the situation of being forced to use the future and a larger environment for monitoring our intentions and our implementations. We need all the information we can get in order to have any chance of things working the way we hope they will. But we soon realize that in spite of all the information, we have very little control over the situation. So we find ourselves increasingly in circumstances that run contrary to the one which has defined the competent male in this society. We discover that we have to act without feeling we are in control. Fortunately, there is enough happening now in the society so that this is not as alien or unacceptable a way of seeing oneself as it used to be. There are traditions, non-western traditions, that go back two thousand years, that say the only wise way to operate is not to attempt to control. Rather, one attempts to be open enough so that what one does is appropriate to the "right" flow of things. I am suggesting that the kinds of theory and practice I have been talking about are helpful in opening up the situation so we can be constructive without having to be in control. And then we can learn. We cannot learn if we are acting as if we are in control when we are really not.

Comment: I would like to change the conversation to focus on your point about the requirement for monitoring the environment. I wonder if you would make a few more distinctions about how this applies to an educational institution, particularly since it seems to me that educational institutions are always future-oriented, probably more so than any other social institution except the church. I think being so future-oriented presents some unique problems for monitoring the environment.

Donald Michael: The first thing I want to emphasize about monitoring is that if you take the task seriously, you are ready to accept high levels of uncertainty. When you monitor the environment that is when you find out that you really do not know what is going on "out there" and, increasingly, "in here". Yet, you have no choice if you are following the line we are developing. It means you have to accept the fact that that particular environment is going to generate uncertainty. You have to accept it. That uncertainty then becomes a shared psychological state. It means you forego another characteristic of our Western definition of competence, namely, acting as if you really knew what was going on or, at least, if you didn't know what was going on, you know what the odds are. We don't know the odds or how to calculate them in a lot of cases.

The learning task for monitoring of this sort is: how much uncertainty, under what circumstances, for what ends? Some monitoring has been forced on us: community participation, student participation, and faculty participation in decision making in areas which were previously preempted by administrators. Monitoring requires reaching out to substantive resources, future studies, and other data about the community that are not typically used. What we do not know here, along with the uncertainty, is what participation, at what time, for what ends is really helpful. Part of the problem is that the norms are yet to be established and developed. This means that once you move in the direction of monitoring you are not only leaving yourself open to high levels of uncertainty and the anxiety that goes with that, but the learning task becomes compounded.

The organization must learn, but so must the environment which surrounds the organization. That environment also has to develop the capacity to learn. Here lies an unaviodable and enormous risk.

If the environment cannot learn to take a learning posture toward innovations, then maintaining a learning posture on the inside becomes extremely difficult. The only way the environments can learn is to participate in that learning process, to be invited "in". That is one of the things we have to learn to do better. My guess is that more often than not the learning will be at enormous costs to the inviters.

It seems to me that many universities and colleges in their efforts to revitalize their general education programs--the kinds of efforts that many of you are involved in--are microcosms of a conceptual crisis of unprecedented magnitude in the West. In the world out there as well as in the world in the university, we are faced with the problem of shifting from an analytic Newtonian scheme of doing things, to a synthetic scheme of dealing with the world because everything is so interactive. It is not decoupled the way it used to be. In the West we do not know how to synthesize such complexity. The observation was made by Kenneth Boulding some years ago that the invention this society most desperately needs is retreivable disasters. Disasters offer opportunities to open up. Societal learning may not occur, but the opening up does because the context which provided the structure has been destroyed. The problem is that most of our disasters are not retrievable. That is the crisis we face in the university and elsewhere.

Case Studies of Change in Two Small Liberal Arts Colleges

Leon Botstein, Evelyn Klinckmann, and Marvin Peterson

Marvin Peterson asked Leon Botstein, President of Franconia College, and Evelyn Klinckmann, Dean of Lone Mountain College, to describe the recent changes at their respective institutions in terms of the future-responsive behaviors which Donald Michael had outlined. Peterson then responded with some observations of his own based on the two presentations.

Franconia College--Leon Botstein:

The institution I represent is the only one of its kind in this particular meeting. It was created in 1961, an outgrowth of a private-public secondary school. It became a college by default. A public high school was built nearby which made Dow Academy, Franconia's predecessor, obsolete. When it was started it had neither a physical plant (two small buildings and a private house-dormitory), endowment, nor faculty. The only way it could possibly survive in the rising tide of the baby boom was by admitting students who could pay a high price and wanted an educational experience they could not find elsewhere. The institution hired faculty at a time when it was not easy to do so. It hired people from the History of Ideas program at Brandeis, from Antioch, and from Goddard. They came with the concern and commitment to make something different out of this brand-new institution. And indeed they started with a revised version of a required curriculum not dissimilar from some recent attempts to revitalize the notion of the Great Books--but their required curriculum was not about the Great Book but rather about the Great People. Instead of selectively reading from Aristotle and Plato, students studied Socrates--the very interesting idea that the student would identify with the psychological and personal development of an individual rather than with the evolution of the ideas. Core programs

on various issues which were problematic--complete with a set of required readings for everyone--were also developed.

The institution was located in a region which was served by no other institution of higher education. There was some initial expectation of its being a local community college. However the absence of public funding--or actually any funding at all--plus what amounted to an urban/surburban student body and the left of center faculty was a very negative rub on the community. The institution quickly lost whatever local focus it had. If you look at the college catalogues for the early years you will be struck by this relatively pretentious curriculum of great ideas, people and issues replete with secretarial courses and the like which were deemed to be of interest to the local population.

Franconia became a four-year school in 1965. Its image already was one of being innovative. It combined some sense of an Oxford system with the concern for the individual tutorial with a more intellectualized vision of the student-centered curriculum. In 1965, an individualized "contract" for the last two years was introduced. The four-year school thus developed consisted of: a required curriculum with some electives for the first two years and a contract for the student on an individual project for the last two years.

As it has evolved, Franconia is in that class of institutions that emerged in the sixties because of the pressure for places in higher education. I am thinking of Hampshire College and New College (which is now absorbed by the University of Southern Florida).

The difficulty was that the institution developed an image that it was innovative per se. Innovation became its reason for existence. Self-conscious innovation fueled its machine. That is very different from those of you who innovated in a larger organizational setting in which you were a subunit. One ironic obstacle Franconia faced was that it was very hard to implement any change. The institution and its student constituents were prisoners of their own notions of elitist self-importance. They read (or thought they did) in the New York Times that they were in the forefront of educational innovation. They believed they had found the true way of doing things. They didn't realize their image of being innovative was carried more in the social ambiance of the institution and a lot less in the substance of its educational programs. To use Donald Michael's terminology: there was no effective "monitoring of the environment"; there was not a "balance between process/task and environmental needs".

When I arrived at the institution (Summer, 1970), I had the good fortune of arriving at an institution that was bankrupt and in political disrepute of the highest order, that was alleged to be one of the best sources in New England for drugs of various forms, and which had a rapidly-declining enrollment. No one chose me or chose Franconia's future in any conscious way. It was really a choice of desperation. The choice in March 1970 was to close the institution or to choose the best possible candidate that could be found or both. No one with a reasonable career invested in higher education would have looked at the job. I had neither administrative experience in higher education nor knew anything about theories of organizational change, theories of innovation, or theories of higher education. My only experience with higher education was being a student--and that experience was

relatively ordinary and uneventful and I didn't pay much attention to it. I was not at all "prepared" in the conventional sense. I was forced to operate on Donald Michael's "mood", "hunch", and "intuition"--but the choice was not a conscious one. And there were no dollars--only time and a fair amount of energy.

What did we do? We asked several questions: "How could Franconia survive financially?" "Who would be its legitimate population?" Who could you encourage to go there?" "What could reasonably be designed as its future purpose?" We had little to "work with" (again, in conventional higher education administrative shorthand). We had very modest and highly inappropriate physical facilities--an old hotel (bought in 1963)--and we were located in a rural, economically depressed area. The faculty that had survived the institution's various turmoils (18 of them resigned after a drug bust in 1968) were either nostalgic about a past which they thought was very good or hostile toward me and what I was doing, or both. This was also the height of the touchy-feely movement. Many faculty hired after 1968 felt our undergraduate upper-middle class students should be given not substantive education but process. The students should learn how to work with people. Instead of requiring Aristotle, Plato, or anything else in the freshman year, we should require group process and conflict resolution. The chairman of the faculty and many faculty held that point of view at the time I arrived, and had the good sense to resign. I did make sufficient administrative changes to clear the institution of the most visible and articulate obstacles. The only reason I could do that (and it's dark humor of a kind) was the absence of money. Institutional poverty gave life to Machiavelli's notion that necessity breeds virtue.

Second, I was relatively unsympathetic to the notion of innovation. I did not consider the question of how to be innovative, but rather tried to diagnose what the purpose of the institution could be and what reasonable objectives could be implemented. We looked at the area and concluded that an institution of higher education in northern New Hampshire must legitimate its purpose to the community in which it resides. Franconia was dependent on the community for its survival: the institution had been locally initiated; the Board was substantially local; any potential for fund raising would be local. But the institution really was viewed as an albatross around the community's neck. Under those circumstances it could not very well survive with any educational program that was not, in some degree, clearly focused around community needs.

The motivation of students presented another obstacle. The touchy-feely curriculum was obviously not working. We had typical upper-middle class, counter-culture students who had been taught all their lives that they were under-achievers by parents and educational institutions alike. Despite their obvious talents, they had very low self-images. They were viewed negatively by their parents, who had gone to Harvard, Yale, or whatever, and thought they should have gone to such places, just as their brothers and sisters. We had a very difficult clientele, a clientele which was very hostile to most of what goes on in conventional higher education institutions. So we stressed the notion of taking them off-campus, of putting them in the field, we tried to give them the experience of getting involved in a problem, a practical situation, in which they had to generate their own motivation to pursue learning, to understand what the practical needs of a community were, to proceed as far as they could, and go back to the classroom when they needed help, education, and support. That put the classroom in a reasonable perspective with regard to the future of their education.

We dispensed with both the sensitivity courses and the general education courses for the time being. We developed course proposals primarily in the social sciences and channelled them (as best we could) through a newly created Project Institute--courses which put the students into the field and then brought them back to the classroom for more theoretical and traditionally academic work in response to the heightened motivation that they would experience. Over the last couple of years, the program has been transformed to allow some faculty to be free to do community service work full-time. Students work with these faculty. We have a program producing a newspaper for prison inmates in the New England area, a program which involves the design and construction of a local high school, programs in the mental health area, in education, and in the environment.

This program is the innovation which brings us to this Institute. We call it "community service education" - the integration of community action and education on the undergraduate level. The program has given the institution two very important things: substantial credibility locally and a very exciting mix of faculty and staff for students. It will now lead, perhaps, to the improvement of freshmen and sophomore education prior to specialization which had been one of the original interests of the institution. Why do I say this? Because as we attempted to integrate theory and practice through community service in the social sciences, we discovered that our students were ill-prepared to confront complex social problems. The illiteracy was not only in verbal terms, but very much in scientific terms as well as in artistic terms. One of the interesting things about Franconia College, and it is true of many of the smaller innovative institutions, is that they have a very good relationship with the arts. Unlike the University of Michigan and Harvard, the

practical arts are not segregated in different institutional structures. There is parity between the academic and the artist. There is parity among the scholars, the researchers, the critics, the teachers, and the active artists. We saw this parity as an opportunity to integrate a general education experience that ranged from the sciences (which are probably the weakest link in most experimental colleges) to the arts (which was definitely one of our strengths). We also confronted the problem of how to remediate, how to get the student to a comprehending level but avoiding that treadmill of introductory courses which are designed at too high a level (to avoid the stigma of survey courses), often according to the expectations of very professional faculty. You know the cycle: students cannot meet those expectations, the course is watered down, and faculty become very disappointed in the process.

One of the mistakes I think we made in trying to develop a coherent curricular structure for the lower division student is that we hired the wrong faculty. I have only recently reached this conclusion and I was instrumental in hiring the faculty we have now. Our mistake was that we viewed the problem to be the lack of quality in the previous faculty, lack of real involvement in their disciplines. We sought very highly trained professionals, most likely with a Ph.D. or its equivalent, who had become disaffected with the conventional institution of higher education, be it large or small, public or private, and who, for ideological reasons, wanted to teach in a self-consciously experimental college. We hired a faculty who had exhibited a tremendous disaffection with conventional higher education combined with high degrees of professionalism and a set of expectations--not a common set for what Franconia would be like. The trouble was that their expectations of the ideal within the institution could

not be met. Despite their desire to break down their own professional prejudices about what were legitimate lines of inquiry, many of them retained professional ambitions. They found it very difficult to become generalists in a situation where some really intelligent generalism was required.

Second, one of the things which Franconia was most famous for was its cooperative governance system. I am increasingly coming to believe that that kind of cooperative government structure placed too much emphasis on process and too little on task, on result. The discussion was engeged, but was never resolved on issues of curriculum, on issues of goals, on issues of change. It is precisely the emphasis on process which makes self-consciously innovative institutions the hardest to change. The institutions that have the greatest public investment in change are trapped by their own myths. One of those myths is the cooperative decision-making process, the emphasis on a "sentential" consensus within the institution for change. We never achieved an organizational learning norm. We were afraid to take risks.

Why, then, were some changes relatively successful? These changes were born of necessity; the institution had to find and form a justification for existence on mission, objectives, pedagogy, and organization structures. The change in mood on the part of faculty and students with regard to the local environment was most important. What was at best condescension in the sixties had changed in the seventies to an admiration for the uncomplicated, nonsmog-filled rural existence. We were able to capture a tremendous desire to reach out into the community on the part of faculty and students.

Our major failure is in the area of general education, in failing to achieve the primary objective of residential, small colleges. We have not been able to strike a nimbly supportive balance between the

reactionary, reflexive return to some notion of general education 20-25 years ago which really did not work very well, and the tremendous explosion of innovation in the student-centered curriculum, the do-your-own-thing movement with learning contracts. We could not come up with the pedagogy to make the Great Books or Great People an exciting experience, nor could we give our students the knowledge and skills so their individualized projects would not be vacuous exercises.

I think most institutions of higher education are much too interchangeable with each other. Very few of them take a stance which is profound. The absence of substance and recognizable curricular integrity is, as Robert Paul Wolff pointed out in his The Ideal of the University, an ideological choice in and of itself. My interest in innovational institutions is in their making a substantive choice of what they think normatively their institutions should provide to the student and making that choice terribly obvious. In this context I think student-centered curriculum is no choice whatsoever. Consumer-oriented reform is an absolute mistake in my judgment. Catering to student need is one thing but catering to student taste is comething far different. That distinction may be very hard to define, but it should not be ignored. There is a value to a coherent scholastic education as opposed to a flexible, jelly fish educational experience. The problem is that most examples of coherent curricula are reactionary, anti-modern, or too sectarian in political terms, in the materials that they bring to bear, and the learning experiences they promote. I think innovation ought to concentrate on trying to provide some real alternatives to the coherent undergraduate curriculum as, for example, at St. John's.

Let me make one last comment about my administrative style. I think my having a clear dogmatic point of view permits the other people around me to articulate their views. There is a difference between being convinced that you are right, trying to exhort other people to believe that you are right, and being dictatorial. Too much of administrative style is too flexible to give the focus to flush out what

are realistic potentials for an institution or a group of people. Being totally open about my points of view encourages other administrators to state theirs which is a lot better than my being dictatorial or so wishy-washy that everyone has to go through catharsis to get the courage to speak out.

Discussion

Gene Mason: I don't think the "student-centered curriculum" is as much a failure at Franconia as Leon described it. The distinction he makes between student needs and student taste is important. Perhaps we have not sufficiently developed the advising function in our individual contract learning program to protect against the faults and shortcomings Leon described. We certainly haven't mounted a faculty development program to provide the skills and training to enable us to better serve student needs. However, I don't think these are arguments against student-centered learning. Our student-centered learning is still predominantly in the junior and senior years. I also think it is important for people to understand that Leon's comments about general education in the context of Franconia is directed at our program encompassing the freshman and sophomore years and not the whole educational experience at Franconia.

Leon Botstein: Let me say in response that the term "student-centered curriculum" is a shorthand to the process of individual contracts where students define their educational goals and needs and discover the routes to them. The difficulty with the advising system is that it is much too arbitrary. Unless there is agreement among the advisors, the system works to limit student choice by explicitly and implicitly defining the range of acceptable alternatives. Simply allowing advisors to work

with students one-to-one is not a sufficient safeguard given the freedom in an institution like Franconia to change one's advisor. I would perhaps like to see a student-centered curriculum in which students would have a free choice, either through courses or self-designed educational experiences for their last two years. A final comment about the student-centered curriculum at Franconia is that the projects and the routes to a learning that the students have designed with the faculty have been too similar to what is available at other institutions under the normal majoring system. This also speaks to the issue of faculty development. There has been too little imagination. One reason may be vocational pressure. I would like to think that our students and faculty could move beyond replicating in their own classrooms what is available at conventional universities.

Lone Mountain College - Evelyn Klinckmann

I would like to react to the issues of organizational change, vitality, maintenance, and responsiveness raised by Donald Michael by discussing them in terms of some of the dramatic changes Lone Mountain has undergone in the last nine years. Our rebirth is not finished by any means, and I hope your questions and comments will point to areas where you sense we may have taken a wrong turn.

First, a brief sketch of what has occurred at the college. Approximately nine years ago changes began at Lone Mountain. At that time it was known as San Francisco College for Women. The overall enrollment has not grown in the nine years, but the characteristics of our 900 graduate and undergraduate students have shifted dramatically. Slightly less than one-third are enrolled in our graduate programs. The median student age is around 28, but the range is an exciting 16-60 years. There is a tremendous mix in terms

of ethnic and socioeconomic backgrounds: 27 percent of our students are from minority groups representing the great diversity of San Francisco. Any institution which had tried to deny or ignore the changing needs of that student population would no longer be in business.

Some of the changes over the last nine years have come out of necessity, but most have originated from the faculty's concern for the kind of education we were offering and about the relevance of our educational programs to various kinds of students, particularly in the urban setting of the San Francisco Bay Area. We are fortunate to have faculty who not only have good academic qualifications but who also have come to Lone Mountain because they are primarily interested in teaching. For the most part, they are very creative teachers. Innovations didn't have to be imposed upon them. They were quick to perceive various needs, and have been one of the primary sources of innovation.

What happened over the last nine years is what happened at many institutions. We introduced an independent studies program, on-campus tutorials. In addition to regularly scheduled classes and standard majors, we have implemented a program called Tunbridge which involves mentors and field experiences. We also have other programs involving internships and field experience at both the graduate and undergraduate levels. What makes Lone Mountain so special in relation to the broader academic community is that we recognized that we were getting so diffuse in our innovations that we no longer had a clear idea of exactly what we were doing. In order to establish some coherence in our program, we undertook an effort to redefine and redesign education at Lone Mountain. At a faculty retreat, the faculty agreed they would like to maintain the liberal arts focus rather than shift to more career-oriented educational objectives and programs as so many other institutions have done. We reaffirmed our allegiance to a concept

of liberal arts that goes back to what we feel is fairly fundamental, that is, a freeing of the individual to deal with herself/himself and the world he confronts. We perceived that liberal arts had become structured in terms of disciplines of knowledge and that this was not conducive to the basic idea of liberating or freeing the individual. In trying to go back to that basic concept, we began to think about the ways we could redesign programs so that we were helping the student acheive that kind of freedom.

There are five objectives in our efforts to redefine and redesign our undergraduate curriculum: (1) defining the goals of the college, (2) redesigning and developing programs, (3) reallocating resources among those programs (this gets into faculty load, utilization of space, differing faculty roles in relationship to faculty load, and so on), (4) redefining the bachelor's degree requirements in qualitative terms (we attempt to identify competencies qualitatively, steering as far away from the quantitative semester unit measures as we can), and finally (5) developing new ways of identifying and recruiting students who can benefit from the types of programs that we are offering.

We have just (1974-75) completed the first year of what we estimate will be a three-year project. We have focused on exploring statements of goals and trying to come up with general statements of goals and missions. We have spent considerable time and energy redesigning the general education curriculum. I will draw on these experiences in talking about the four categories presented by Don Michael.

Structure vs. Emergence. We have attempted to structure for emergence. Our planning process was consciously established by our coordinating committee so that ideas and programs can be developed not only by the planning committee but also by other people in the college. The feeling

that programs are being imposed--whether from external sources or an authoritarian internal mechanism--have lessened considerably. We began by proposing an alternative program based on courses that faculty had introduced in years past. We identified four of those: one called "Connections", which stimulates an exploration of perception and awareness primarily using the arts; a second focuses on issues of science and society; a third provides off-campus study and field experience; and the fourth generates some sense of the continuity of human experience through history. Starting with a nucleus of ideas from those courses, the planning committee tried to define what would be appropriate subjects for study and objectives for students. It was during that initial process that one of the students on the committee said, "Wait a minute, you've left something out." And so we developed a fifth area of study which focuses on human relations, understandings, and skills utilizing our rich crosscultural resources.

Within these five areas of study, we hope to develop a variety of courses. Students would be expected at some time in their college career to be exposed to each of the five areas of study. They would have an array of course options within each area and could choose to take those courses any time in their four-year education. We think exploration of the various dimensions of human experience represented by the five areas of general study can go on concurrently with study in the major field of specialization. We recognize that many students now are interested in a particular career area. They want to get started right away. It is frustrating for them to be held back, to hear "Hey, wait a minute. You have to have general education prerequisites." We feel we have not minimized the importance of general education by permitting students to opt for those courses at any time in their college careers. We have minimized some of their

frustration and in some cases we suspect they will choose to delay taking these courses until the third or fourth years. Some of our students will have richer experiences than if they had been forced, or had freely chosen, to follow the traditional path.

I started out by illustrating structure and emergence. The structure of the planning committee seems to have let definitions of the areas of study emerge through discussion with an additional fifth area filling a gap in terms of other things we thought were important. In order to maintain clarity and enthusiasm we realized that we had to move quite actively into program development. We sensed that we just could not maintain excitement by focusing on abstractions of educational goals. Consequently, we moved quickly in identifying areas in general education and developed pilot programs for them.

This process of conceptualization in developing the five areas of study and pilot courses for them is an integral part of the process of clarifying the overall goals of the college. We will have concrete examples of some very general goals that we firmly believe in. We recognize that we must constantly check to see that our general goals and objectives align with our programs. That is why I emphasized that these are pilot programs. But I think we are well on the way to implementing a new organizational pattern for learning.

Formal theory and intuition. In my experience as an educator who likes to get things done, I would prefer to talk about this category in terms of what I call "functional understanding." I think that, in reflecting on your own experiences in dealing with any kind of educational problem or educational change, you develop some kind of functional understanding of what is important to pay attention to. Now that comes out looking like intuition after a period of time, and one of the things I find very helpful in the use of formal theory is that it usually confirms my intuitions. The way I like to use formal

theories--and the way in which I have encouraged our planning committee to do it also--is to consider each theory as a lens through which we can look at a given situation in the real world. Each theory gives you a perspective on that situation which is different from another theory which is different from a third. Look at the same situation through three or four theoretical models and things begin to "pop out" that perhaps would have been overlooked if you had not used those theories. But we do not start from theories.

One example of the theoretical statements that emerged from discussions here was the emphasis on community understanding as a means to maintain and revitalize organizational structure. I think that is extremely important in the kind of endeavor we are engaged in, especially along the task/process dimension. Let me give an example: at the end of the first semester we decided it was necessary to try to communicate more with the College community outside the planning committee. Despite our best efforts at maintaining open communication there were a lot of misconceptions about what we were doing, a lot of criticism, and a lot of concerns which needed airing. So we wrote what we called a "progress report" to the College community and published it in the usual mimeograph form. As we were getting ready to distribute it at the beginning of spring semester somebody said, "Nobody is going to read it in that form." So we also published it in the format of a newspaper. (I have since discovered that hardly anyone has read that either, but at least the newspaper is more likely to be picked up.) This relates to task/process because, although we were clear on our task of building community understanding, we at first ignored the question of process--of how we were going to present our report to the college community. When we did switch to the newspaper format, it was already the end of April and there wasn't time for feedback and interaction about the kinds of things we were doing and the kinds of ideas we had come up with.

Failure and decline. In the process of change, we tried to revise our governance system. Our experience has been similar to Franconia's. We learned that everybody wants to be involved in governance until the time comes to actually do it. We made the mistake of setting up a very elaborate governance structure. We discovered that nobody had time to participate. We are attempting to salvage what I think is a failure by staying with the basic concept of having each constituency (students, administrators, faculty, and staff) represented on all policy committees but simplifying the number of committees and the kinds of issues they deal with. Another example of a failure that I hope will turn into a real success is the human relations cross-cultural pilot course this semester. There was not enough definition in advance of what was supposed to happen in that course so students spent almost the whole semester in process. The students got very frustrated. Incidentally, most of the students who had opted for it as a pilot course did not really need it, as they were the students already aware of these things and able to communicate well. As a result of their frustration, at least four alternative pilot courses will probably emerge, each having a slightly different emphasis within the broad framework we have defined for this area of study.

We recognize the critical importance of having some means for developing and maintaining organizational learning capabilities. We have initiated a rigorous internal evaluation process. This semester we have been trying out different evaluation processes for these pilot courses. We have purposely avoided bringing in those ubiquitous experts because we hope that, by trying out a variety of things and getting people interested in making suggestions about how to evaluate them, we will all learn more about course evaluation. I hope this learning process will have a carryover in the way we function as faculty and administrators.

Monitoring the Environment and Goal-Setting. One aspect of that process for us has been looking at the basic value-restructuring going on in our society and trying to define that reality in relation to the educational goals of our institution. Unless we do this I don't think we are really going to come up with anything that is significantly different in the way of undergraduate liberal arts education. I think we need to push our questioning, and our conceptualization processes, in order to discover the salient features in our society with which we need to help students begin to deal. What are the important things to study? What are the most meaningful ways to help students learn in terms of their own educational goals and their own learning styles? Unless we begin to push really hard on these questions, until we discover ultimate values and beliefs we can rely on and agree on in at least broad terms, I don't think we will have done anything particularly significant. Otherwise we stay at the level of mindless organizational restructuring, of new programs coming one after the other without any cohesion.

The importance of developing community underscanding cannot be underestimated. Community understanding does not negate disagreement, but rather implies that we have to interact with each other long enough and in sufficient depth so that we really begin to understand each other in terms of basic beliefs and values. A lot of implicit values and beliefs are built into our traditional liberal arts education. We don't question those very often. We should, for only if we begin to question and to understand what we mean by such terms as "intellecual development", are we going to achieve anything significant in our academic endeavors. This is my particular bias and dogma. We must push to a deep level of conceptualization in developing community understanding and on that basis redefine our educational programs, objectives, and organization.

Commentary: Marvin Peterson

I think much of what Don Michael outlined was reflected and identified in these two case studies. Each of you indicated that you handled the dilemmas of balancing choices somewhat differently. You also showed you were very much aware of some of the other factors Michael raised, but that they seldom emerged on a formal level in your institutions. You did not talk a great deal about contingency planning or the fear of failure and how you used or did not use failure creatively.

There are a couple of points I felt were not sufficiently emphasized to which we might give some attention now: one is that an innovation often has an organizational life of its own. It is a small organizational entity which needs to be nourished, encouraged, and maintained as it grows and becomes or does not become part of the larger institution. Innovations usually occur in very complex organizational settings. However, our organizational change theories do not always deal well with the problems, processes, and dilemmas of innovative activity. Often, the most these theories do is point out the need for a much more conplex form of organizational analysis or to problem areas of which we need to be aware.

We must look at the college or university as a complex, open organizational system. This means, as we have all emphasized, that institutions are open to influences from the environment and have the capacity to react to or even influence that environment. At Franconia, there are certain external conditions which encourage possibilities that are not found in other settings. A second point is the necessity to pay attention to different organizational levels. This may not be so obvious in the case of small institutions like Lone Mountain and Franconia. But in the case of a college which is

only one campus of a larger public system, it is suddenly possible to analyze at the level of the innovation itself, of the small college unit, of the larger campus unit, or even of the multi-campus state system. Some innovations have to be reviewed by several decision levels before being implemented. Understanding these multiple levels are helpful in identifying constraints which must be overcome. It is also helpful to look at each organizational unit or level as it relates to its next environment or level. This level-of-analysis issue must be confronted by all of us.

While the innovation may be a smaller organizational unit within the context of a college, it should be obvious that it cannot be analyzed solely from the standpoint of the formal organizational system. Both Leon Botstein and Evelyn Klinckmann pointed out that it is the informal culture which must be examined in order to understand fully what happened at Lone Mountain and Franconia. We did not hear much about political questions but we all know that introducing innovative change, particularly in a complex university, is a political victory as well as an educational one. It is sometimes an ideological victory, a victory in getting the bureaucracy to move, or an interest group victory in martialling a favorable vote.

If you get involved in analyzing innovation, you will always run into the crucial problem that accompanies any kind of complex, rational analysis. Often the result is that you can find so many reasons why an innovation "won't succeed" and why you "can't do it". Analysis becomes a form of paralysis, a rationalization for not doing anything. It takes a special kind of person who can recognize constraints--and at the same time perceive opportunity. Both Leon Botstein at Franconia and Evelyn Klinckmann at Lone Mountain were able to do both, in terms of their own strongly-held values.

Here is a critical point: an educational philosophy and a belief system sustain innovators through all the risks and trials--and help them start in the first place, even when analysis tells them it cannot be done.

STUDENTS AND FACULTY

Theodore M. Newcomb and Robert Blackburn

Students

The belief that shared experiences were the most fertile ground for learning was the basis for many of the "living-learning" reforms of the 60's. The growth of small student-centered residential colleges in many instituitons was evidence of the concern about student development. The older, non-traditional students, adults more likely to know what they wanted from higher education, who flocked to colleges and universities in the 70's, did not fit into the mold. Many had families, jobs, and other responsibilities which prevented them from joining the 18-22 year-old students in the dormitories. Special programs--"external degree", "Bachelor of Liberal Studies", and so on were developed for adult learners. These programs emphasized individual learning modes--modules, correspondence, faculty mentor, contracts--or classroom instruction at times and in settings that did not bring students together in more informal ways.

Theodore M. Newcomb, a leading exponent of the "living-learning" environment, led a discussion comparing campus-based programs for adult learners. From this, the participants turned to a free-wheeling discussion of recent changes in the interests, values and styles of 18-22 year-old students.

Theodore M. Newcomb

Let me begin with a question for the representative of the External Studies Program at the University of New Hampshire which serves adults in learning centers which are located off compus: You think you know something about student roles in your college. Well, how do you know about them? You are committed to teaching-learning modes which are totally different from what is found on the main campus. A role isn't really a role if it isn't somehow conventional, if it isn't somehow normatively backed up. Students' roles in different colleges across the country can differ a great deal. But I want to know in your particular college, assuming, of course, that you do know something about students' roles, how do you know? What's your evidence?

Lewis Knight: The learners we have live at home. Their academic programs are grounded in their home and community. Learning is not totally an isolated experience. Our students often work with other learners in their geographical areas. Their role in the college reflects a different kind of connection to the university than students in traditional campus-based program.

Theodore M. Newcomb: That's very interesting. Students do have a role in your institution. You are saying the role is peripheral, but that doesn't mean it doesn't exist.

Lewis Knight: I am not sure our external learners see themselves in the institution. I was thinking, when you asked me the first question, that I would not dare to try to find out how they felt with regard to the university until they had at least gone through the process of assessing their life experiences. That assessment process is the bridge separating adult citizens from adult learners. Participating in the assessment process encourages these adults to view themselves as being in the institution. Until they go through it, they find it hard to conceive of themselves as really students. They are learners, they are in a program, but they are not really part of the university per se.

Theodore M. Newcomb: You are saying that the institution is pretty peripheral to their lives. In that case, why are you bothering if there is no such thing as a student role? I am exaggerating obviously, but why are you spending your time there?

Lewis Knight: First of all we have seen that students eventually do begin to develop loyalties toward the institution. That loyalty usually emerges toward the end of their programs. They gain a sense of community of learners, a subgroup, when they work together as learners. These experiences bring out their loyalty to the university. They see themselves as having a vital role in the program from the outset, but not necessarily as having a role in the university until later on in the program.

Theodore M. Newcomb: The university then is a rather distant facilitator for most of their learning program. I would like to know how common this perception of the student role is among other people?

Lewis Knight: Our students are adults who range in age from 30 to 63 years. There is a self-selection. They all have demonstrated talents or skills. They have identified themselves as having accomplished something, as having some desire for learning, and definitely having a desire for the degree. Through their identification with the External Studies Program, they have expressed a sense of alienation toward the institution. We do not select students on the basis of their professed good feelings about the University of New Hampshire, but those adults who are motivated to enroll in our program seem to have that alienation initially.

Theodore M. Newcomb: I had assumed that you were interested in students as participating in the innovative process, in the educational innovative process. I had reasoned that if the student doesn't see him/herself as having a role of some importance in the institution then he/she isn't going to become very much involved in the innovative process.

Zelda Gamson: There have been changes in the UNH program that I understand to be direct responses to student complaints on an individual level. While the students might not view the institution as their home, they do identify with their program and the particular people they interact with. They want something from that program, not from the larger university. And I understand they are quite adept in getting what they ask for.

Maurice Oliver, University of New Hampshire: The program is actually built around the specific needs of the learners. The learners have direct contact with an average of five different faculty members. Most faculty have never had this kind of interaction with an adult student. In that interaction the roles become traditional; you have a learner and a faculty member usually face-to-face. Either the task is an asessment or it is the developing of a contract for independent study. The program builds upon those interactions. I think students do see themselves as part of the institution through that faculty member. That faculty member becomes the crucial link with the institution.

Theodore M. Newcomb: So, it is the student as related to one or more faculty members that is at the heart of the thing. I am puzzled about this, and, it has to do with a little personal history. I have been a social psychologist all my life. A good while ago, I rather suddenly asked myself why am I teaching, writing and researching about social psychology and not paying any attention about how social psychology works out in my own institution? Social psychologists are always saying that group membership does something to you, that there are certain norms. The multiplicity of persons who share the norms magnified the effects of educational programs. I remember justifying myself this way when I went somewhat timidly to deans and the President of this University arguing for the creation

and support of the Residential College. If students had easy, everyday, normal, casual contact with one another and were studying the same things at the same time, there would be a multiplied effect on them and their academic work. Maybe I was kidding myself. Now Lewis Knight is telling me that this isn't necessary at all, that his kind of adult program at New Hampshire deals with individual students interacting with one or more faculty members as if contact between students was not important. Certainly strong group norms are not developing among students.

Lewis Knight: Let me correct something. Group norms are nurtured. We do encourage support groups of seven learners to work with each other in preparing for assessments and in fulfilling some of the learning contracts. They meet in different ways; there aren't many formal group meetings of seven. Many times they meet in smaller subgroups, sometimes with a faculty member, sometimes with me. That informal interaction is vital for the learning process.

Theodore M. Newcomb: Do you think they get some help from each other, some kind of support?

Lewis Knight: No question about it. We need to devote a lot more attention to this. We are experimenting now with four different types of support groups. These support groups are being extablished along student interests. We will be looking closely at which processes work for which groups. We hope to learn to match learning activities to student interests more effectively.

Theodore Jolosky, University of Michigan: I think Ted Newcomb brings up a good point. A number of programs for adults, especially those that are self-paced or individualized, have the possibility of

leading towards a much greater degree of isolation on the part of students. In certain instances this isolation can be detrimental to the fullness of learning. I feel that sense of isolation on the part of students who attend College IV which is part of Grand Valley State College in Michigan. The curriculum there is totally personalized. There are no mechanisms for interaction among students. Students are coming to the faculty and demanding opportunities for engaging in interaction with other students. They feel that there is a gap in the learning process, a gap in their own sense of fulfillment.

Richard Newton, Temple University: Our idea in designing externally based "extraordinary courses" at Temple was that the students would indeed be quite isolated from the other learners. There were a few of them who tried to overcome that, but the context of individualized modules of learning in which the students progressed at their own pace made interaction between the students moving at different paces extremely difficult. For the purposes of learning in this particular set of courses, the student was indeed isolated from other students. Students were free to place themselves in some other situation which was not necessarily determined by us. Except for the standard rules concerning grades, quality of work, and so on, I guess you could say that our program was intentionally peripheral.

Theodore M. Newcomb: What these various external programs have in common is that the institution becomes instrumental to purely individual objectives. This puts a somewhat different slant on the question of what the student's role is, if it is merely to view the college in terms of "what it can do for me".

Gene Mason, Franconia College: I have observed the steady growth of the norm of individualism among traditional-age students at Franconia. Students are most resistant to any imposition of something other than

an entirely student-centered curriculum orientation. When the college was created years ago it was fairly easy to develop very small programs that had a group norm. But to do that on the level of a general education curriculum, even in a very small institution of 350 students, would be almost impossible today. The tension for faculty and administration is that while students selected our institution because of the high degree of individualization we permit, we think more group learning experiences, expecially in general education, would benefit both students and faculty.

Maynard Smith, Hobart and William Smith Colleges: The programs came out of the late '60's and early '70's and addressed the needs of students at that time. If those needs have disappeared do we fold our tents and disappear into the desert? If we do, it's in part because our programs were there to meet felt needs that aren't there any more. If we don't, it is because there is something we think is intrinsic to the kinds of things we are doing that ought to be part of an educational process. There aren't any rules about how this decision should be made.

Steven Winter, Tufts University: Students are indeed changing. They are more concerned with grades and graduate school and less willing to drop out. They don't see as many avenues of choice as they did four years ago. I don't want to lament the death of the student protest movement, but the changing student values, needs, and aspirations significantly affect the College Within at Tufts. Students are less willing to stick their necks out, less willing to gamble on our program. If they do decide to come in, their proposals for individualized projects are more modest than those of their predecessors. This trend has implications for our faculty and graduate teaching assistants.

Our emphasis on the interdisciplinary approach seems to buck the current career thrust. Should the College Within cease functioning because our clientele changed or is what we offer such a vital educational experience that we should be carried by the university whether or not we have students?

Theodore M. Newcomb: Now this leads me to ask a general question which may or may not be important. The central theme this evening is the role of the student. Are we saying to each other that the role of the student changes, if not overnight, certainly over less than a decade, that it changes with customs and times and manners and morals? In short, are we dealing with a chimera, something that changes everyday? Is there anything we can really talk about?

Seymour Simches, Tufts University: You are asking whether it is worthwhile. I say yes because I think that what is needed now is another way of answering that dilemma. How do you avoid falling victim to that sense of risk and at the same time allow the students to express the needs which they do feel? When I left the College Within* and returned to my "traditional" classroom, I carried over a number of the processes that I had used at the College Within--for example, the use of a learning journal. I discovered students there had the very same concerns: "Are we going to be blown to bits by an atomic bomb?" "I'm thinking about my sister. She committed suicide three weeks ago." "My aunt is dying of cancer." These came up in connection with a course in French literature because we were reading Camus. The journal offers an opportunity to express these concerns in a situation which

*Faculty are only permitted to stay at the College Within for three years and students for only two years.

is perhaps less risky than a formal classroom. I am trying to use what we once called experimental processes in a way of dealing with the student's repressed needs or less expressed needs. They have feelings and some very "heavy" moods of death, of depression. I am very much impressed by an article by a psychiatrist at the New School for Social Research, which calls the youth of today "premature geriatrics". They are older before their time. They are forced into decisions about career, about life, because of the competitiveness of the system. I think there is a very definite need for coming up with new experiments, new ways of dealing with this problem.

Richard Hoffman, Mars Hill College: We have been talking as though the student could play only an active role in shaping curriculum. Our program at Mars Hill serves a very different kind of student. We are trying to serve the Southern Appalachian region. Our students come to Mars Hill with a rather deep set of rules, family and otherwise. They come with some self-images which are rather limited. We have to work hard to break down the self-perception that they are not equal to the task of college. We are confronted with the problem of taking students who have a rather deep sense of dependency and building a curriculum which forces them to make choices on their own, to assume some responsibility for their own education. At the same time we have to build a structure which doesn't just say, "Here it is, do it", and leave them totally frustrated. We have assumed that there is some stability in the student culture that we serve, and we are building a program around it. If that should change dramatically in two years, then we would have a program that would be obsolete.

Robert Marshall, University of Pittsburgh: Are people really saying that one of the purposes of innovation ought to be to meet the students' unfelt needs and unperceived needs? We always seem to talk about

innovation as the end of the process, the beginning of the process being certain faculty interests and/or certain student interests. But I know in my institution, one of the purposes of innovation is to stir up the institution, to wake up faculty and to wake up students. To a certain extent I am prepared to resist the tendency of students today to be uninterested in education, to be merely goal oriented, to not care about the relevance of education. I don't know quite how to put this, but a few years ago I was very concerned with the university responding to students, to student activists, to student needs. Theirs was an easy message for innovators to interpret. The students were asking for the kinds of programs you supported. It was very easy to say let's do what the students want to do. Faculty who opposed "relevance" often had very tough going. But now to a large extent, students don't want to do what we want to do as innovators.

We are talking about restoring general education. Will we have any takers? I think we have a different set of dilemmas about the uses of students for the development of innovations. If we did what students wanted us to do at the University of Pittsburgh, we would spend all our money building even more laboratories so that 2,000 students could be in freshman biology instead of 1,000. I'll do anything I can to try to cause students to ask themselves why they are doing this sort of thing. Why aren't they asking themselves: What are they interested in? What are they good at? What are their real talents? Instead, they respond to some set of objective influences which lead them all to go down the same road.

I find myself almost in an anti-student stand these days. I don't know whether I have changed or whether they have changed. All that's proven is that a few years ago it was easy to be for student participation because students wanted the same things we wanted. I happen to think we were right. By we, I mean those who participated

in the changes that took place a few years ago. I really believed in most of those changes. And I still believe in them. And I'm going to resist anybody, faculty or student or anybody, who tries to make the pendulum swing back. Because I believe that we were right.

Richard Giardina, Bowling Green State University: Do you think it is possible that we overestimated the quality and the quantity of desire for reform, particularly at certain schools? I think we are struggling today with a machine which was really too massive for the problem in the first place. We overreacted in the 60's.

Maurice Oliver: I would like to make a broader comment which might tie these loose ends together. I want to draw the distinction between the institution as innovation and innovation within the institution. Institutions like Mars Hill, Lone Mountain, Franconia and even the College of Arts and Sciences at Pittsburgh in a sense are saying to a student, "Here is a little package that we have to offer. If you want to buy that you are welcome to, but it is a package." I don't want to overgeneralize or over-simplify, but while there may be tensions about career versus non-career orientation in these liberal arts programs, students are definitely buying into the whole thing, a whole package, a whole experience.

We are also talking about another kind of innovation, an innovation which also recognizes student needs and provides the structure for the student to learn. The student is the primary focus in this innovation. Setting, pedagogy, and so on are really secondary concerns. A group of adults don't need faculty and administrators making decisions for them. They are mature. They don't need socializing. They don't

need a growth process in an academic setting where they can associate, discuss, exchange ideas and grow. One of them may be saying to the institution, "I need a course in economics because I am 37 years old changing my profession, and need these cognate areas and skills to get another job. I have my own friends. I'm married. I have my own kids. I don't need social development. I don't need this or that, or a total package of decision making. What I do need is this knowledge. I am coming to the university as one place to buy that." That student has initiated that innovation. That student by his or her existence, by his or her demands, creates the necessity of the innovation.

James Hall, University of California at Santa Cruz: Don't you think there are 18 to 22 year-old students who conceive of themselves as the type of adult you described, who don't come to be "in" a college, but who come to buy knowledge? We seem to be resisting the notion that they could possibly know who they are or want to be at age 18 years. The challenge seems to be to provide programs and institutions for both kinds of adults--without depreciating the self-concept and/or aspirations of either. I am not sure the needs of both kinds of learners can be met within the same institution. The norms conflict. I am not sure they can be integrated. . .

Faculty--George Amis, Robert Blackburn, Herbert Hamsher, and Seymour Simches:

Robert Blackburn led a discussion on the role of faculty in aiding and abetting innovation. We have excerpted the way three of the participants responded to this question. At the end, Robert Blackburn commented on these and about ways of thinking about the role of the faculty in innovation.

George Amis: An organization climate supportive of innovation and the strengths, peculiarities, and foibles of faculty innovators seems the most critical variable stimulating innovation. Let me illustrate with a description of what has been happening recently at Santa Cruz. Santa Cruz was founded on the notion that doing things differently was probably a good idea. Because it is part of the complex University of California system and occupies a position of a "kooky" younger sister, we are allowed and indeed even encouraged to do things which other campuses would not be allowed to do at all. That attitude encourages innovation in a protected environment.

There was a fairly broadly-based perception of problems at Santa Cruz. These problems were perceived as being fragmentation within both the student body and the faculty, the general failure of the general education freshman programs that we had tried, the short life-span of the interdisciplinary programs, and a very strong sense of faculty isolation. These complex problems were all identified as being ultimately connected to failures of the college system to do what it was supposed to do. We did not blame external factors. The administration under pressure from higher-ups in the California system had a very strong sense that something ought to be done to strengthen the colleges, but they had no idea what that should be. While the administrative climate encouraged faculty innovation, there was no leadership in the sense that the administration was unable to locate

ways of going about it. The complex organization of the institution discouraged innovation, but its habit of mind encouraged it. The organizational climate encouraged administrative tinkering, but, as I have stated, the administration didn't know what to do.

It was in this setting last year that the faculty formed a committee, the Committee on Budget and Academic Planning, in order to get information out of the administration on the nature of the budget. That objective was never realized, but the committee did devise a series of plans which involved the redistribution of faculty among the colleges. This year the committee was reconstituted and undertook the task of revising the study proposals of the previous year. Using questionnaires to garner opinions and establish a broad base of support, the committee devised a relatively simple set of structural changes for solving a complex set of problems and stimulating new innovations. These recommendations were turned over to the administration because it was generally felt that the whole question of moving faculty around was too delicate to be dealt with by the faculty itself. So the major faculty roles were initiation, planning, information gathering, and generating consensus. Implementation was largely left to the administration, an administration which was critically supportive of faculty innovators.

Herbert Hamsher: We should really talk about a reward structure which is both overt and covert. I am thinking about the perceptions of faculty about the reward structure as viewed by administrators. Faculty at every institution have a feeling they know what they can be rewarded for. Administrators, on the other hand, also have a very

good sense of what they are rewarding. The non-overlap between those two systems is often incredible. If you take faculty members at Temple, I'm sure you would get 96 per cent agreement that we get promoted on the basis of how much we publish. If you would talk to administrators at my institution, I am sure you would get agreement that that is not true, that administrators are perfectly willing to promote to tenure on the basis of other contributions to the system. The ultimate arbiter from the consumer point of view is the student. Students always know what it takes to get promotion and tenure, and that never involves creativity by their perception and that never involves teaching, but rather the tolerance of teaching as students and faculty perceive it. If you are productive, it is okay to also be an enthusiastic and good teacher, but it is not okay to be a good teacher and a creative innovator and not also be productive in the more traditional sense.

There is an assumption that publishing more is to be desired and publishing less is not to be desired. Here, there is clearly an assumption that to be innovative is desirable and not to be innovative is not desirable. Clearly this Institute goes on record as making us an in-group, identifying us as separate from those people out there who aren't nearly as innovative as we are. Clearly this conference is part of the reward structure which feeds into creating more innovation. The more that gets generated, the more it becomes very much like a professional society. The question that very seldom gets addressed is, "Is it valuable to be moving in this direction?"

I don't at all know that the people in this room are creative. I also don't know that the people in this room are innovative. All that I really know is that they were invited here under the rubric of innovation. And what happens psychologically, it seems to me, is a very curious process by which we now become or could become the definitions of innovators and in the process we start making a case for our attributes being the attributes of the innovator.

I would be fascinated to know the perceived reward structures of people here and more about the degree to which people here perceive themselves as being creative and innovative. I would be willing to predict that we would have absolutely every point on the spectrum. To try to get some kind of gestalt, some kind of principle, derived from that vast spread seems to me an empty exercise at best and most dangerous in the sense of ending up with the illusion of having learned something which detracts from the recognition that we really know very little. As a psychologist, I am far more concerned with the factors in getting programs off the ground, the interactions within the affective environment, particularly the degree of overlap between perceptions by faculty and administrators of each other and perceptions of self, perceptions of faculty by faculty and administrators by administrators. The same thing for students.

One of the points supporting that kind of emphasis is the degree of energy that has been created in the Institute for talking to each other. I look at this as a phenomenon which is demonstrative of our tremendous resistance to talking about theories, principles, and other abstractions. I sense all of us are, at least on the intuitive level, aware that we have very specific things to say to each other. To pretend that we can get to a higher level of abstraction is an illusion. I think that is part of the reason why we simply wanted to talk to each other and not pretend that there is anything than our own very specific experiences that we can give to each other. The strain toward generalizations about innovation and the innovative process I find particularly dangerous and melodramatic.

Seymour Simches: I want to deal with the sense of productivity as a matter of rewards for a specific kind of behavior. I'm going to illustrate it simply by asking questions of the premises. Assuming you wanted to do "x" number of things, what kinds of changes and

psychological behavior would be demanded? Are these changes possible? Are these changes profitable to the point where, for example, a professor of animal behavior could say, "My six months involved in a particular innovative program was the most fruitful experience I've had in my whole academic life"?

Assume you want to set up a teaching team in which you have a senior faculty person with a good deal of teaching experience surrounded by a team of two graduate students each representing humanities, sciences and social sciences. Suppose you wanted to have a relationship between these graduate students so they can learn at least something about college teaching for the future. Then assume you have associated with this team ten undergraduates, each of whom is going to bring to the team an individual problem which is solvable and demands inputs from the three areas, for example, noise pollution in the Detroit Airport. This problem can be dealt with by the scientists in terms of its effects on body systems; it can be dealt with in sociological terms by investigating why people live near the airport; and it can be dealt with by the humanist who might ask whether the whole thing is ethical and what would Camus have to say about it.

What does this situation demand of faculty? Chances are that you are going to find someone among your faculty who has already specialized, has already taught for a number of years to the point where he has a reputation for being a good teacher in the community and who, when asked, will be willing to step out of that role to play a very, very different role. That teacher will be asked to try to connect his/her own knowledge built from knowledge of other disciplines. This faculty member will be required to be very closely related to the graduate students as a role model. Suppose, in addition, that the faculty person usually comes bare as a newborn child to a problem which the undergraduates wish to study. How do you prepare your faculty for

that kind of teaching situation? This is the kind of problem one faces in the typical innovative program--faculty are being asked to do something they are not accustomed to doing.

What does it mean to be a mentor with a graduate student and with undergraduates? How does an individual conceive of his/her own professional identity? How does he look at the teacher role? Have we defined this phenomenological process in the innovative behavior of the faculty? I question whether we have. Essentially, these are the kinds of problems to face when talking about the role of the faculty in innovation.

There are some solutions you learn by hard knocks. The change from the classroom teacher anchored to the lectern to a mentor who can relate very personally to an individual student is not easy. The traditional faculty member is conditioned to coming into the classroom with a preconceived plan, with the assignment sheets, with an idea of where the class is going to be in a particular subject from September to December. The sudden shift of roles from a time-oriented situation to a timeless one: from one where the faculty member holds the keys to the situation to one where the reality is more imposed by the student is very disconcerting and in many cases does lead to a lack of success. Some are successful almost immediately. Others stay a semester and then ask for a change.

Finally, how do you get a spinoff from success, when it does occur, into the regular classroom? I think too often we consider the innovation qua innovation. We talk about failure in terms of the failure of the phenomenon itself. We haven't heard much discussion about spinoffs from innovative efforts.

We found that the possibility of changing roles was exciting for faculty. They enjoy this reinforced schizophrenia where they innovate for a limited period of time and then go back to their de-

partments, to their own specialties, to their own publications. You reinforce their credibility. Then they venture back out on a limb again to get their heads cut off, to be daring, to be reckless, to lose their credibility again. So it is a constant balancing of losing credibility and trying to regain it. But nevertheless it has its positive side because the process does provide for a return home. "Come back, Little Sheba" becomes almost a dramatic way of saying to faculty that they can do the maximum amount of innovation because it is for a limited time and they always have the possibility of returning to their traditional settings and reinforcing what they were doing there. We have also found that success can be measured in the feedback, the amount of different kinds of teaching, in the different rapport that faculty bring back to their traditional classrooms. I find that my teaching is quite different now that I've gone back to the classroom.

Problems still remain in terms of the traditional measures of productivity. When the chips are down and the faculty tenure promotion committee meets, how many brownie ooints will the person get for this kind of behavior, as rewarding and satisfying as it may have been? To what extent can you, in fact, regain the credibility of your colleagues? To what extent can you make understandable to others without measurable signs of success?

Commentary: Robert Blackburn

What can we say about the innovator? What factors attract faculty to innovative institutions? Most of the people we recognize as innovators had considerable expertise in their specialized disciplines as they began their careers. Most of them have extraordinarily good pedigrees, graduating from the best universities and the best departments. It is not clear to me why they chose to take an atypical route. Some are rebelling in some way. Some want to interact very

directly with students and find nontraditional programs a way of satisfying that need. But after a number of years we find many innovators withdrawing and being less available to students than many traditional faculty. Fatigue sets in for everyone who engages in innovation. Great stress can develop, and that stress does affect performance. I am very much concerned about how healthy this is for the long haul. We don't do enough to protect our innovators.

I would disagree with Seymour Simches' contention that faculty can innovate for awhile, then go back and legitimize themselves again. I don't think it is that easy to do, although you might build in a supportive structure that does move people in and out more frequently. Donald Michael pointed out that such adaptive team structures have worked for private businesses which have tried them. Faculty would have to develop new ways of looking at themselves, and the college as an organization would have to change its reward system to make such a cooperative system work.

I think the critical ingredient in the creative act is not only the idea in its first flush, but completing it, displaying it to colleagues and getting a full critique. Innovative programs can quickly become very provincial when they are not open to criticism. When outsiders are not brought in to be supportive critics, the innovation becomes self-defeating because participants are often blind to their own faults or incapable of self-correction. There isn't any professional society that brings innovators together or encourages them to travel to see somebody else's innovation. Innovation too often becomes a cult of those people on the inside. Too often it ends there. For me, this is a destructive part of creation.

Another of the critical factors that stymies innovations is the difficulty of communicating across disciplines. People in different disciplines speak differently--the use of pronouns is different,

the sentence structure is different. The writing style is different in a memorandum that tries to persuade somebody in the natural sciences versus somebody in English Literature. A nice organized outline pleases the natural scientists but the person in English is much more concerned about the rhetoric and style of the memorandum if it is going to move him. I think people are sensitive to these things. You find you just simply cannot get the message to go between people who think differently and view the world differently. This might be why interdisciplinary efforts so often fail. It is hard enough to get two or three faculty talking across disciplines--but to persuade the rest of the faculty that you three have something worthwhile to say and do is well-nigh impossible in most places.

I suspect that innovators, like people producing typical research and scholarship, could benefit from having some kind of an "invisible college", some connection with associates at other institutions who are engaged in similar kinds of things. It is helpful to know what is going on and where it is going on, whom you can call up, who might be a judge of this, who would give you a quick response to an idea. One of the best predictors of academic scholarly productivity is the amount of contact that a person has with those outside of his/her own campus. There isn't any formal organization of innovators, although there are networks. Perhaps this Institute will contribute to a new one.

EXTERNAL FORCES

J. Steele Gow, James L. Miller Jr., Maurice Olivier and Gertrude Patch

Colleges and universities are neither self-sustaining nor self-sufficient institutions. Students, new ideas, tuition monies, community pressures, and other external stimuli provide the resources for and, to varying degrees, determine the purposes of higher education institutions. Innovations within institutions are particularly vulnerable to the pressures of external stimuli. Student interest is one obvious factor affecting innovation, but subtler social, economic, and other societal forces also affect innovation. These forces often cut through institutional practice to the heart of the institution. James L. Miller Jr. led a lengthy discussion of the relationships of external stimuli to the innovations at the institutions represented at the Institute. He asked participants to give some attention to the maintenance of institutional integrity in an environment where the pressures of external stimuli are constantly shifting. J. Steele Gow, Maurice Olivier and Gertrude Patch gave the following accounts of the effects of external stimuli on their institutions. Excerpts from the discussion growing out of their presentations follow.

The External Studies Program at the University of Pittsburgh--
J. Steele Gow:

The program at the University of Pittsburgh that brings us to Ann Arbor is our External Studies Program. It is difficult to speak of the program alone for it gains its significance as part of the total array of efforts we have undertaken in our College of General Studies to serve adult students. External stimuli apply to these programs as much as they do to the External Studies in particular. Therefore, I would like to describe briefly the broad, general societal stiumli to which we are responding as well as to describe more specific and immediate kinds of external stimuli.

For the first time in history, more than half of the students in postsecondary education are attending on a part-time basis. Their proportion is increasing regularly and rapidly. The availability of employment after high school, the need for skill upgrading, and the increased willingness of colleges to provide service to these part-

timers are all contributing factors. The higher education establishment has traditionally frowned on these part-timers and has made it difficult for them to attend. We must reexamine this attitude. The ever-increasing dependency we have imposed on young people by extending compulsory education and entry level educational requirements have gotten us off the track biologically and psychologically. The women's liberation movement and the different aspirations for careers outside the home among women both place demands upon, and are at least partially the result of, increased educational dependence. A large part of our population who at the normal college age were too poor or otherwise unable to continue their higher education now sense they have a right to that opportunity. These factors seem to sum to a new development. The time is coming when full-time education, and the dependency that entails, will end for most—at about 17 or 18 years--including the best and the brightest. Further education beyond high school will go along with work and family responsibilities and, of course, continue throughout life.

The second of these broad societal factors is the "decampusing" of higher education. The personal as well as the public costs of campus-based education are becoming less and less cost-effective. It is now technologically as well as economically feasible to provide many higher education services off-campus: in the home, in the neighborhood, and in places of work. More than 75 per cent of our population live in metropolitan areas. The great bulk of our population is within the service range of central educational facilities. These people can either commute to a central or branch campus or faculty and educational facilities can be brought into their homes, places of work, and neighborhood community centers.

There are other broad societal factors which I will mention in passing. The unionization movement among faculty will greatly change and perhaps largely eliminate the collegiality that we speak of as being achieved through on-campus education. There is a strong movement, sometimes it seems almost like an earthquake, toward more career-oriented education. The growing perception of the irrelevance of much of the college curriculum reflects this trend. Finally, many different kinds of institutions are getting into the higher education business, including corporations. Formal institutions of higher education are suddenly finding themselves in quite different competitive situations.

At a more concrete local level, the University of Pittsburgh is a state-supported institution--not quite a state university in the middlewestern sense, but sort of a public-private hybrid. Our activities have been influenced markedly by the recent movements in our state to institute state master planning for higher education. The state system can eliminate needless duplication of services as well as assuring an equitable distribution of services across the state. There has been considerable speculation that the state will open an open college or "para" college o its own, much like Empire State in New York.

It is impossible to ignore these developments. They have been a positive stimulus for the kinds of activities we have undertaken, but I am sure they are looked upon as anything but positive by some others. We also must confront the growing impatience among state officials, legislators, and governors over what they perceive as higher education's self-indulgence. For example, the use of the term "academic freedom" to protect a lot of practices which do not make sense to people outside the fraternity offends many people. They take umbrage over our "we know best" attitude and our demands that

they give us the money, that we will decide how to spend it, and that they cannot look over our shoulder while we spend it. Their impatience stems partly, of course, from the fiscal strains that the state governments are under. Moreover, it is only natural to extend the consumer protection movement to higher education. The states are pressing for greater efficiency, productivity, and more reliable evidence that they are getting their public money's worth for all kinds of social services, of which higher education is but one. The fiscal bind in which our state and most others find themselves produces several negative facors, too. State officials have generated much confusion through their efforts to minimize duplication of effort and competition among institutions, while at the same time pressing the institutions of higher education to reach out and serve more people. The conflict between these two guidelines at the state level are inhibiting adaptations to emerging needs at the institutional level.

External to our particular school, the University of Pittsburgh Adult Education School of General Studies, are some factors within the university itself. From my perspective, these factors are external to our program, although "internal" factors. Our activities benefit from the university's concern about its own survival and its increasing emphasis on supporting programs which pay their own way. (This happens to include almost everything that we do.) Perhaps most important on the positive side is what I call the "benign neglect" of an operation like ours in the university. Our off-campus, evening programs can be easily ignored. This low visibility provides a great advantage; it enables our school to institute practices and programs with a minimum of fuss and bother--to get them on the road first and reviewed later. That implementation process is quite different from having to go through a maze of review procedures prior to implementing a program.

There are also negative factors in the immediate environment. We have had some experience with faculty defensiveness, a generalized fear toward any new way of conducting higher education. The usual budget constraints also pose problems.

Our programs within this External Studies Program represent various responses to the different mixes of external forces impinging upon us. The External Studies Program which takes our programs off-campus into the neighborhoods is called "community educational services". Our testing for credit, "Challenge Examination", accepts very restricted kinds of life and work experiences relevant to particular academic programs. We have non-degree career development programs, as well as special programming for women who resume their collegiate education after their children reach school age. Other programs are targeted at particular populations like the veterans and the elderly. Veterans constitute approximately a fifth of the total enrollment of the University, and we have about two-thirds of them. Several programs have been developed in cooperation with trade unions, using union halls and facilities. The "over-sixty" program is for those approaching or already enjoying retirement.

The Continuing Studies Program, University of New Hampshire--
Maurice Olivier

The stimuli in the population we are trying to serve are most important for us. There are only 700,000 people in New Hampshire. The central campus is located in Durham. The branch campus in Manchester reports directly to the Durham campus. In 1963, the two state teachers' colleges at Plymouth and Keene became part of the university system and directly responsible to the Board of Trustees. Before 1963, both state colleges reported directly to the State Department of Education. Hence by legislative act all institutions were merged into the University System of New Hampshire.

Until the early seventies, there were no programs or organizations working toward a system of higher education in the state. However, quite suddenly the UNH System Board of Trustees committed themselves to making the system more responsive to its constituents. They hired a very innovative president who, instead of talking with senior faculty and various faculty committees, toured the state to see what people's perceptions of the univeristy system were. The tour took six months, and he discovered that over three-fourths of the state had no idea that Plymouth and Keene were tied to the university system. The new president also reviewed programs at the various campuses and concluded that the University at Durham was responding to the upper one-third of the state student population. He felt very strongly that the University should somehow structure itself so it could begin reaching out to the adult population—though not to the neglect of the 18 or 19 year-old students. In response to this concern, the School of Continuing Studies was created in four months, although two years is the normal rate of progress for new programs to win approval from the various committees.

The School of Continuing Studies was conceived as a superstructure, the fifth academic unit of the university system, a non-campus unit responding largely to the adult student. Two store front offices were set up in Durham and Concord, the state capitol, to assure access for the adult population in both cities. The School was initially viewed as the broker for all university system courses. All the courses listed in the catalogs of any state institution could now be offered through the School of Continuing Studies and taught in different locations throughout the state and in "non-academic" places such as homes, churches, and town halls. We offered everything under the sun. In addition, each of the campuses, except Manchester, had and still has a Division of Continuing Education which is largely responsible for evening programs on each campus. These Divisions control all

evening courses offered at locations within a radius of the campuses. If the same program is offered at a site located outside the three-mile perimeter, that program becomes our responsibility. You can imagine the dickering and politics behind that compromise decision.

Our School has 19 separate programs which are administered through this structure. Some of these programs were established in unpredictable ways. For instance, in the north there were three "learning centers", where people can learn through a mix of professional instruction and self-teaching. These centers were created when six north country residents approached the president with a 45-page proposal which asked for an external degree program in the north country. Their proposal was an adaptation of the Empire State College model. The president found himself in the situation of saying he could deliver because the School of Continuing Studies which was to be responsible for all the off-campus programs had just been created. The School inherited the task of translating what these folks wanted into programs our system was capable of delivering.

Was the School the victim of the hidden strategies of the north country innovators? They were appealing to the University in Durham because they wanted to become accredited by the University and become part of the University. They wanted to create the image of a "Granite State College" à la Empire State College. It hasn't worked, primarily because we were being asked to do things the University had no experience in. Adult students sent in thick portfolios. We looked at them, then virtually ignored them for six months because we didn't know what to do with them. The expectation levels on the part of the first group of students we were working with were very high. They were engaging in discussions at the three centers which raised expectation levels without checking what the system could do. There were rough spots to be sure, but I don't think our school was victimized. We

simply responded to external stimuli and in the process established new programs in the state. These programs are largely a reflection of the various kinds of adult audiences we were trying to serve.

Lone Mountain College--Sister Gertrude Patch

There have been a variety of external stimuli leading to change in our institution. What I am going to present isn't a chronological listing of them. There are certain constraints and certain encouragements that we have received. The first thing I want to touch on is a group of three things that came out about the same time: societal changes, our own religious renewal, and the beginning of an external college at Hunter's Point. All of those were stimuli from outside which encouraged me to inverstigate our own education to see if we were really providing the kind of education we said we were. We found that although one of our purposes was to try to arouse in our students a concern for social justice, we were educating in a way that was primarily theoretical. We were concerned for the education of those who had potential but who had not had opportunities, and we wanted to find ways to give those students access to our institution. We wanted to provide the kind of liberating education which would develop in our students individual skills which would help them if they desired to become change agents in our society.

The questioning that I went through personally, as a member of a religious order and as an individual reflecting on changes in our society, made me begin questioning things in the academic structure. Why were traditional departments and divisions the best way of organizing faculty to provide liberal education? What was so magical about four years of college and 128 credit hours? Why did colleges have stated goals which were almost totally unrelated to or only accidentally related to graduation requirements? Why couldn't self-educated, wise people be inserted at various levels in the college as students without having to be measured according to academic courses? Why was there the rather artificial separation between lower and upper division?

Why wasn't there a way for highly-motivated students to be more involved in the design of their own program? Why couldn't we design courses which deal with knowledge in a very existential, contemporary, meaningful way? Why couldn't we do more to meet students where they were and help them to experience the excitement of learning rather than impose courses on them which many thought boring but necessary? Why couldn't we help students become aware of the riches of the cultures which are not their own? Why couldn't we help students bridge the gulf between the abstract and the practical in a better way than we were doing? Why does formal education have to be tied to a place? So that is the set of stimuli which you could call broadly social.

The second major stimulus was the Bay Area, particularly San Francisco itself. It is a treasure of education resources. It is small enough so that students can be tied into all sorts of different, valid learning experiences without having to go great distances. It has a wealth of cultural and ethnic diversity. It has in it a variety of potential students whose needs really weren't being met by the large, impersonal state university system, people who needed support, encouragement and opportunities to succeed. It is a center of arts with all sorts of potential for creative expression and experimentation.

A third set of stimuli were the resources of other colleges and universitites in the Bay Area. They were negative stimuli if you want to call them that. We couldn't attempt to match the variety or expense of the offerings by larger private and public institutions. We could lose out both ways in attempting to emulate them. We could not get any students to pay our tuition if we had nothing distinctive to offer.

A fourth stimulus and perhaps the greatest stimulus in one sense is our financial situation. Very often people think that church-related or church-affiliated institutions have support from the church. We are more an independent college than a church-related college. We have never received any money from the Catholic Church. I suppose .

you could say with hindsight that the founders of the college were lacking in realistic planning ability. They thought of the religious personnel connected with the institution as being the "endowment" and never dreamed of the time when they were not going to be involved in contributing their services to the college. So, we have no endowment to speak of. We had very few private donors, and those who had given generously to the college during its building phase we pretty much turned off by what we were trying to do. We had not educated our alumni to annual giving. I think that we felt that it was rather immodest to share our financial problems with anybody outside the community. We had a commitment to tenured faculty. Therefore, we had a group of people it was essential to work with. Unless we responded to the special needs around us we couldn't hope to survive, as far as I could see, because we wouldn't be able to attract students; they could get the courses that we were offering at public institutions.

From the financial situation and our attempts to meet certain needs, we started certain things which we later had to stop. I'll just give you a couple of examples. We started a counseling center for women who were coming back to school after having raised families or who had been in dead end jobs. We had to discontinue that support service because we didn't have the money. We started a cooperative day care center for the students and faculty who had children and needed that kind of help. Again, we had to stop that because we didn't have money. We have since been able to supply or support both of these services in different ways. So it seemed to me that if we were going to continue as an institution we had to seek funds to help program development wherever these funds could be found. And it didn't mean going after funds just to be going after funds, but going after funds which would support what we were really trying to do educationally.

After a great deal of labor we had some success getting various foundation grants. Most of these foundation-funded programs led to the further development of programs. I thought maybe I could very briefly go through our short history of foundation granting. We were approached by a group of faculty who are in the teacher education program who had been overseeing our students teaching in inner city schools. They were really appalled by the kind of teaching going on and wanted to do something to improve the teaching situation in the inner city schools. They came up with the idea of recruiting minority individuals who had the potential for learning, and who had a great desire to be educators. Those qualifications, plus a very careful interview, were the only requirements for admission. We had a very small grant which came out of the blue--it was a $10,000 grant that I found in the mail one day from the government, of all places. It was supposedly a planning grant, but it didn't say what we had to plan with it. To this day I don't know how we got it--it was some kind of fluke. Anyway we used that grant to support the initial program and then we committed a great deal of our own institutional funds towards the support of the students who came into the program. The program really did a great deal for the students who were in the College and for those students who came to the inner city schools. They were incorporated into the classes. The principal difficulty, as many of you can imagine, was that some of them did not have the skills that really are necessary for college work. I would say all of them who lasted through the program had the intellectual ability, all the personal qualifications. So we tried to remedy their needs for skills by using personal tutors. We have a very unusual faculty who are dedicated to teaching. They are really concerned about students and will work very much overtime to do whatever they can for the success of the student. So that planning grant helped us get the program started.

As some of you may recognize if you have ever gone after grants, almost always grantmakers are interested in so-called new or innovative programs. If you have had a program going one year you have to change it a little bit the next year in order to get more money. So the next year we changed the program just slightly but enough to be able to attract another government grant through Cooperative Education. The year after that we changed it again very slightly and received San Francisco Foundation money; the Director of that Foundation helped us get Van Loben Sels Foundation money. In the fourth year the San Francisco Foundation continued their support of a career development and placement center at an even higher level, which was quite unusual.

The second development of that program led to a private donation. The man got very interested in the program and contributed towards that. Then the next year he contributed towards the support of a career placement development center which helps our students in many ways explore what the possibilities are for them in certain majors, helps tie them into jobs, gives them career preparation, workshops, etc.

By this time we were trying to work more with San Francisco and the larger Bay Area community and it was at that point that I was asked to be on a national commission and so I had my air fare paid to go back East three times a year. Again the finances were important. Air fare seems terribly small, but I have been brought up in a tradition that taught me to be terribly careful of money, and so I rarely would go to the East Coast on college funds. The commission membership gave me the opportunity to go to the foundation circuit in New York. The first foundation I went to was Carnegie and they became quite interested in what we were doing as it related to the community. It happens that someone at Carnegie was going to be out in San Francisco the next week. He came to the College and

became very enthusiastic about what we were doing. We were able to get a three-year grant from Carnegie and that has seeded several programs which I think are very important. Two of those seed programs have in the meantime been able to garner more funding in order to continue. The Carnegie grant enabled us to explore the use of nonprofessional educators as adjunct faculty to provide enrichment for our own students. It also enabled us to bring people from the larger community into classes with our regular degree-seeking students. It gave us money to invest in production media equipment to help our students learn the use of video-equipment with the purpose of working within community organizations to develop programs which could be used on cable television or for advertising.

The third aspect of the grant was for cultural enrichment through the people who were to be drawn from the Bay Area community. It was an attempt to bring the Bay Area community and the College close together. The Carnegie grant led to the development of a master's program in community development and public service. It is one of the programs designed to fulfill a college goal I mentioned earlier: the desire to link the abstract and theoretical with the practical. This is a program which is directed towards older people in community development public service agencies who are in low level roles but who have a great deal of potential and need a specially-designed program. This program is made up in part of very individualized studies and in part of core group meetings with faculty as a kind of mutual support. Finally, there is a seminar for the total group bringing in outside speakers who can assist them in very general sorts of things including grant seeking for their agencies, use of media, etc.

The other program which was seeded by Carnegie money was the Tunbridge program. (I just found out last week that it has been funded for three years by the Kellogg Foundation.) Tunbridge provides

a variety of things such as career exploration, bridging the gap between the younger and older generations, practical work experience, contribution by students to whatever projects they are working in, use of nonprofessional educators, etc.

As I mentioned earlier, we needed some way of providing remedial, enrichment and personalized learning for our students. Again we had no institutional money and I went to a foundation in San Francisco and asked them for money for an instructional media center including the personnel to develop the program. They gave us money for the equipment but not for the personnel. At that point in the history of the College we had come to a turning point. At a faculty retreat, everyone recommitted themselves to the liberal arts and to closer definition and synthesis of what we had been doing in our experimental programs. That led to an application for a grant from the Fund for the Improvement of Post-Secondary Education. We were able to get that grant. In fact, I think we were one of five institutions in that first round of applications that were tentatively approved for a three-year grant. It was for totally revitalizing undergraduate education. That really means synthesizing what we are doing and improving it. Yet we also were able to build into that grant the personnel needed for the instructional media center.

At this point we have a fascinating situation in the college. There is a great deal of excitement for students who are experiencing some of these pilot programs. Along with curricular changes, we also have preserved a traditional program. We are heavily into personalized study, the off-campus tutorial programs like Tunbridge and others, and you can imagine what this does for record keeping. It was very obvious that we needed some kind of information retrieval system. So we went to the Exxon Foundation for the resource management allocation program. They were terribly interested in the fact that we

had the FIPSE grant and since this ties in very closely with our need for information retrieval, we were able to get an Exxon grant this year.

Then another interesting thing happened. We have been told by so many people that Lone Mountain College is an extremely exciting place and we should get ourselves better known. In my travels to New York many of the people who have visited the College say New York is the place to attract students. They want to get out of the city; they want to come to San Francisco, etc. So I applied to a small foundation in San Francisco to ask for advertising money so we could go to New York and advertise. We got that money and we will start in the fall to do a pilot advertising program for two months and see if we, in fact, can attract students from New York.

That is probably much too long a summary of that kind of stimulus. Another kind of stimulus se have had is appeals for help from individual groups; they are related to our financial stringencies because we do not have institutional money. We run on a very tight budget. We have very poor faculty salaries. So we have had a struggle to respond to these needs. In most cases we have been able to respond, but the responses have had to be cost-effective. The first group was a group of masters level students from Sonoma State who wanted us to help set up a faculty-student structured clinical psychology program. We have a very good undergraduate program. They wanted to build on that. It had to be cost-effective; by some miracle or other, they were able to do it.

Goddard College approached us because they had too many external students in their program and asked us to help. We were able to set up an external program in psychology which is now quite well developed.

A group from Southeast Institute at Chapel Hill applied for affiliation because they had heard of our clinical psychology program. We have a relationship in which our clinical psychology people travel several times a year to Southeast Institute and act as resource people and monitor what happens there. We were able to work out a similar arrangement with a group in Miami who were interested in our external psychology program.

The California Public Interest Law Center asked if they could establish a master's degree in legal studies at our campus. We contracted with them to provide that kind of program. We have since taken ove the program and are now candidates for accreditation by the American Bar Association. The Bar Association is very receptive and has expressed a great deal of pleasure with the report that we sent in. (The program received accreditation in Fall, 1975.)

At the request of a proprietary art school, we worked out a way to provide a bachelor of fine arts program because our art program had strengths that their art school didn't. We worked cooperatively for three years but found that the arrangement was not terribly satisfactory. Their dealings with faculty were resented by our faculty; our faculty felt that the faculty of the proprietary school was being shortchanged. So our faculty voted to have the program become totally our operation. In each case, initiation of new programs on the master's level has in some way been tied in with requests from outside and also with an attempt on our part to link the theoretical and the practical.

Commentary: James L. Miller Jr. and Participants

The outline on the next page suggests several questions that we will want to be asking ourselves as we continue our discussion of external stimuli for innovation. The relationship of these to institutional integrity is an area that tends to be neglected in such discussions. We have heard success stories that say, in effect, "We went to the funding source and we got the money." Well, how did that happen? What took place? What were the variables? In most cases that is not the way the story goes. There is also the issue of the integrity of the program, activity, or institutions.

Richard Giardina: One of the problems that we talked about with Cosand was the difficulty of maintaining resources within the budget, "seed monies", to stimulate innovative efforts. Lone Mountain may not have experienced this problem yet, since it has been so successful at generating external support on a continuing basis, but I wonder if the college has come to face the necessity of having to reallocate internal resources in order to sustain innovative efforts that may have been started with external monies?

Gertrude Patch: Yes, the problem of continued funding of innovations has been one of the basic things that we have talked to the foundations about. We were able to build continued support into the grants from the Fund for the Improvement of Post-Secondary Education, and from Exxon. Both of these are designed to help us re-allocate resources so that we can have that margin, and we do commit a certain amount of internal resources to this purpose. We have never specified this as innovative money, but we have freed people to concentrate on certain areas of development. This is in effect a dedication of institutional money to that purpose.

Seymour Simches: I wonder about long range planning at Lone Mountain. What have you done to insure against complete success of these externally-funded programs? If they were all completely successful does

Figure 3.

External Stimuli and Innovation

Forms of External Stimuli

Financial

Governmental ("basic" support for all; grants to selected programs)
- State
- Federal
- Local

Private
- Foundations
- Individual donors
- Corporations

Regulatory units, standard setting units, planning and coordination

Units (avenues to social accountability or uniformity?)

- Accrediting agencies (regional and specialized)
- State planning and coordinating agencies
- Voluntary consortia
- State and Federal programs to encourage "innovation" (or to serve other purposes which may affect innovation positively or negatively)

External stimuli as support

- Financial
- Non-Financial

External stimuli as constraint

- Intentional constraint
- Unintentional constraint

Interaction of external stimuli with each other and

- Reinforcing
- Non-reinforcing

Interaction of external stimuli and the innovative program or unit

- Direction of flow of ideas, proposals, and pressures
- Active versus passive

(continued)

Figure 3. (continued)

Integrity

- Absolute integrity versus relative integrity
- Integrity of purpose (ends) versus integrity of means (style)
- Intra-program consensus on integrity
  - Is it important?
  - How is it achieved?
  - How is it maintained?

Integrity and external stimuli

- Supportive external stimuli
  - Intentional
  - Unintentional
  - Neutral
- Threats to integrity from external stimuli
  - Intentional, unintentional, and neutral
  - How can they be identified?
  - How can or should they be dealt with?

this not threaten what seems to me to be the admirable core of the institution--that faith in liberal education and the commitment of faculty to service?

Gertrude Patch: That is a very good question. With assistance from the grant, we are working on a long range plan which would provide some insurance against complete success. One of the reasons we sought the grant was because the faculty were overextended and overloaded, especially with the increased emphasis on individual tutorials and faculty counseling. One of the purposes of the grant is to see if we can reallocate faculty resources in such a way that we can provide for both the traditional and the nontraditional without overloading our faculty. The Exxon grant will also assist us in that task. We have had great difficulty in developing our planning capacities because of the kinetic mix of both traditional and nontraditional components. We have had difficulty in getting the kinds of information that we need and the lead time to make good sound decisions, especially financial decisions.

Our present plan has undergone periodic evaluation and revision, usually in conjunction with the institutional accreditation process. With the tumultuous changes in curriculum and the general revitalization of the whole institution, we perceive the need to involve more people in the planning process. We hope the result of these efforts will be a plan which is good and financially sound and which has the adaptive capabilities Michael has outlined as so critical for responsible confrontation with the future.

James L. Miller: Steele Gow, I was impressed by the list of stimuli you think will militate against the continuation of collegiality, of college education being a four-year experience on a college campus. How have you dealt with those stimuli in your programs?

J. Steele Gow: First of all, accept for the sake of discussion my thesis that higher education is going to get further away from being a youth ghetto that is separate from the real world. We don't need to do anything to cause it to happen, it is just going to happen. Our students have their own circles: families, work groups, etc. They have other social elements in their lives which make the collegiality on campus less important. I don't know if there is anything really superior about our faculty over and against other categories of people in society for the socializing purpose.

Having said that, let me quickly add that we do a variety of things to insure that our students in the External Studies Program are not just out there as isolated individuals receiving stuff by mail. There is a lot of back and forth by mail and by phone. There are three intensive half-day interaction sessions on Saturdays as part of a program. Particularly at a big university, I suspect that the amount of student-faculty interaction in the conventional on-campus teaching is not nearly as great as we like to think it is. In our kind of institution, that is the standard we have to match. It would be unrealistic for us to attempt to match the degree of interaction which occurs at institutions like Franconia or Lone Mountain. And I think the kind of life-style and learning relationship that seem to be evolving have to be achieved by other means than through the mode of the small, private, residential college.

Let me pick another kind of program, but part of this general set. Women returning to resume their education need mutual support activities in addition to curricular experiences. All the women on our staff, including not only professionals but the clerks and secretaries, have organized a women's task force and have generated a number of activites that give these women a better sense of themselves and their potential. Some of the seminars are support sessions where women help one another work through their guilt feelings about not being with the children and the dishes. Similar support services

have been developed for our large population of veterans returning to campus. These people ordinarily would not have gone to college. They don't have the family support and expectations that most traditional college students have.

Robert Marshall: I am here as the official "critic" of the External Studies Program and for a couple of weeks I tried to convince Steele and others that I am not an opponent of the program and I am certainly not an opponent of innovation. But he wouldn't listen to me. The point is that I think it is a fine program, particularly for the sorts of missions that Steele's School has. However, the thing that bothers me about it is the attempt to say that it is "the same thing with a different delivery." It is a completely different model with a different audience, different results, different purposes. What we ought to do is not choose between the two models but make appropriate decisions as to where one is desirable and where one is not desirable.

What concerns me is that too much of the teaching in the College of Arts and Science is really teaching that might as well be in the External Studies Program. One of our distinguished historians said that he thinks the students learn more in his External Studies courses. That is probably true. This professor is conservative pedagogically, and the way he teaches he might as well be passing out his notes three times a week as mailing them to his students. The point I am making is that the hard thing to get across when we are talking about teaching and off-campus education is that they involve different processes which get different results. There is not much criticism of the External Studies Program because faculty are largely insensitive to differences in educational styles and purposes. They do not know that, because that is the way they teach. Given what my purposes and goals are in teaching literature over fifteen weeks to a lot of young people,

there is no way that I could put that in the mail. If I could, then whatever I was doing I would be doing very, very badly. If what I am trying to accomplish could be done in the mail, then I am a fraud, for I have no control over what my objectives are.

I am not critical of Steele's program. In fact, one of the things I would like to see in our daytime school is a daytime version of the School of General Studies. At Pitt we are not yet recognizing the changing student body, the degree to which they are working increasingly more hours a week, the ways in which they have to be part-time, non-residential, etc. We will respond, but the changes will be slow and painful. Tnis model is entirely different from the one that says that basically education is a residential experience.

By residential I no not mean living on-campus, but rather students coming together as a group, where the purpose in courses is not to learn the materials but to learn how to relate the material with other people, how to discuss and critically evaluate. I have no desire to make any value judgments about those two, but I must insist that they are very, very different.

THINKING ABOUT THE FUTURE

Donald Michael and Participants

Donald Michael was invited back by Institute participants to talk with them in great detail about the personal and organizational requirements of a future responsive society. It was hoped that Michael's presentation would serve as a take-off point for building agendas of activities when the participants returned home.

Donald Michael: I understand that one of the anticipated outcomes of the Institute is the initial development by participants, working either individually or together in institutional or cross-institutional teams, of agendas of things to do when you return to your respective campuses. I think the challenges of long-range planning need to be addressed somehow in these agendas, as does the requirement that the academy realize its full potential as an organization.

For some kinds of innovations the future is the appropriate and necessary context for planning them or for carrying them out. Increasing numbers of theorists and practitioners in the area of long range planning have stated that planning must be a learning process rather than a social engineering process. They have come to understand--and the process has been quite painful for many--that better, more sophisticated engineering will not be sufficient to pilot spaceship earth. The dominant mode and format of planning must change.

The format of long range planning follows a pedagogical scheme, a check list of things to pay attention to. I want to talk about three aspects of that planning process. First, reasonable projections about the next couple of decades, about the general setting, simply make it impossible to take anything other than a learning stance. Next, I would like to say a little bit about a check list of characteristics for learning. Finally, I'll talk about what behaviors are required of people in organizations to carry our long range planning. Here lies the really difficult and painful part of the matter.

Although I have to state learning mode characteristics one after the other, there is no reason to suppose that you have to do them in this order. I do think they all need to be part of the learning setting. And they feed into one another in various loops.

The first learning mode is that we start from the future setting rather than the present--in your case, the setting which the innovation is supposed to be dealing with. There are two ways to do this. If you have a really long-range innovation in mind, you want to look at the future setting as the context for its operation. But that is problematic; you have to go a long way before you get there and by then the "future" will be transformed a good bit. But the future setting is important because it is the setting for judgments about what kind of innovations are worthwhile in the light of what you want to accomplish. It also becomes the basis for myths about what it is worthwhile to be. It defines the present reality. Think of future settings not only as a logical exercise, but as an exercise in building the myths that give vitality and direction to your commitment to your innovation. If you don't use the future settings, you don't have that mythic base. (I am using myth in a positive sense of giving value and meaning to life.)

In the light of those future settings and because you looked at those future settings, you undertake goal setting. I am not using goal setting in the conventional engineering sense (i.e., this is the goal, this is where we are going). The purpose of goal setting in the learning process is to force attention to where we are and why we want to go somewhere. All along the line, in the light of those goals, we want to focus attention on: Are we getting there? What are we going toward? That means, then, that the goals are always subject to change. The obligation to work at those goals is required

in order to be clear about where we are now. If you don't set those goals you don't get clear about where we are now. Goal-setting builds a commitment to why that innovation is important, why you want to do it. It is part of the myth making.

Goal-setting is also a device for obligating us to evaluation. As soon as you begin to set goals, you obligate yourself ethically and rationally to evaluation. What is happening as we go along? That evaluation involves asking questions relating both to task and process. The costs and benefits of alternative innovations that would head toward that same goal must also be evaluated. Goal-setting and future(s) analyses give you a way of generating and evaluating alternative innovations--another virtue. If you begin with the innovation you usually don't look at alternatives. Or the task of looking at alternatives gets to be much more personalized as a fight, a competition, among alternative innovators rather than focusing on what it is you are trying to accomplish.

Another requirement is to attempt to <u>anticipate the consequences</u> of the innovation, if it were to go into operation, for activities <u>outside</u> of the innovation's context. What might it do to other things? This is related to planning for failure, to contingency planning. What happens within the broader university/college environment as a result of introducing the innovation? Does the innovation carry anything else besides the possibilities for further creativity and development? Are there lurking feedbacks that might demolish the payoff of the innovation? Obviously, you can't pin these other consequences down once and for all. That is not the purpose of the activity. Rather, making the effort to anticipate the sonsequences is a way of staying alert to what it is you want or need to learn. It is a way of staying ethical, of not losing touch with the rest of the world through preoccupation with personal commitment.

Working out the sequence of actions that are going to define the innovation and its implementation, its evaluation, and its reworking is another requirement. This sequencing is part of the other steps which loop back into one another, often changing the overall picture and future setting. Sensitized, you can take a look at alternative futures that you might want to emphasize rather than the one you started out with.

Lastly is evaluation. Evaluation is a continuing process aimed at finding out where we are, where we are going, what needs to be changed. Evaluation is the occasion for recycling other activities. It means that you never set a longer-range innovation sailing off by itself. It is always accompanied in this model by a flotilla of activities that are protecting it, enlarging it, and moving around its area of operations continually feeding back a sense of where the whole thing is going. These tasks require a lot of resources, not necessarily dollars but significant amounts of time and commitment--and the personal characteristics I talked about in the earlier session.

I wanted to mention something else that is quite obvious to all of you from your experience, but it is, in the light of all we have said, worth making a little more explicit. Unavoidably going with what we are talking about is intense role stress. That is: "Who am I? What am I doing?" The role stress comes from internal and external questions that are raised. Roles are defined by the senders to you as well as by what you do in response to signals you get from others. In the kind of world and learning situation we have been talking about, it's not always clear who you are, what you are, from these role signals. Conflicting messages will be coming through. There will be conflicting messages from inside of you because your norms and values are splintered and fractioned. Outside role message senders are also in that state.

Comment: I would like some clarification on your model of future planning. Is it linear and is it consensual?

Donald Michael: It is linear in the sense that it is going from now into the future, but it is continually cycling back on itself. On the issue of consensus, the decision process may be one of conflict or of consensus. Somewhere along the line, though, something happens, some "decisions" get made and you move either by way of agreement on a goal or on several goals or on the judgment that it is time to evaluate in this way rather than in that way. If the conflict is such that there can be no agreement, then there can't be any activity of the sort that we are talking about. And that is a very real problem.

Comment: When you apply this to the university situation, I get particularly thin-skinned because I resist the idea of experimenting on students or tinkering with people's lives by remaking the curriculum, whether or not students are involved in the decision processes. And yet I don't think the curriculum can be left to drift without management.

Donald Michael: Obviously, I don't hold these reservations about the decision process. I don't think of it as that linear. It is a continual reflection back and forth. Nor is the process that consensual either. At each stage other parties can come into the process, and the parties that have been involved in it have opportunities for changing their perceptions because they are not constrained to not make mistakes. They have the future as a mirror to hold up all the time and they are constantly monitoring the environment. Let me add that leadership is not always vested in one or a small group of persons, but rotates in response to whoever is perceptive and persuasive.

Comment: Could you talk a little more about leadership being shareable?

Donald Michael: In the different stages of an innovation, different kinds of resources and people apparently do bubble up. One of the things we have to learn is to shift leaders as circumstances change. Sharing information is one of the critical requirements; you can't have a learning system if you can't share the information. Indeed, one of the typical characteristics of conventional organizations is the preempting and blocking of information that is needed for learning. Now this is idealistic as long as the participants assume that the payoffs come from the power that goes with knowing something that someone else does not.

Do you know the matrix approach to management, where there are two bosses? It has been used in this country in development engineering organizations. On one project a person may be the leader; on another project the person is just a team member. But because of the way the roles and the rewards are defined, nobody feels put down. It seems to me that one of the most important lessons in what we are talking about, if it makes sense at all, is the absolute need for training in new process skills in interpersonal competence. When one understands how these things operate, one participates in them without feeling threatened and will be able to take advantage, in the positive sense, of the way people act in group situations.

There is another quality in this approach that is worth mentioning. Everything about the conventional way of operating guarantees distrust both for internal and external reasons. The signals that come back and the signals that are put out are always untrusting signals. You can't learn in that setting. It seems to me that the learning approach engenders trust. Once you begin to trust you can listen more carefully, you can offer, you can accept--it works in both directions. You are not fearful of offering and you are not fearful of accepting.

You can, for example, give up the earlier chosen goal without having it misunderstood, without misunderstanding yourself. If this is so, there may be a built-in augmenter of this process if people once begin to get a whiff of the reward of being able to trust one another. It is so rewarding compared to the anguishes of distrusting, especially in a world that has gotten so bloody frustrating. But it means being willing to be out there in a very vulnerable position to try that out.

What comes through in all of this is what do I know about me. One way or another what must be faced is the excitement and the pain of discovering who I am. That interpersonal competence sooner or later depends on knowing me. But this is a recognition the whole academic tradition, by and large, tries to avoid. The subject matter is placed "out there" and "here" I am. Thus "I" am safely separated from "it". In the social sciences there is a growing recognition of the corrosiveness of that perspective. Yet surely if what we are talking about is to have any chance of working anywhere it means making a commitment to self-searching. You and I cannot get away from that.

POSTSCRIPT

This brief postscript is intended to tie together a few loose ends and to provide some context from which others can pursue the elusive relationship between organizational change theories and innovative institutional practice in undergraduate education. It is offered in the recognition that thinking about the relationship of theories of organizational change and innovation is difficult enough in the concrete--and doubly hard in the abstract. Perhaps we are merely whistling in the wind--or perhaps the learning scattered throughout the transcript will prove useful in the search for organizational structures, processes and tasks which will further future-responsive behaviors and more effective ways of monitoring and anticipating the environment.

Through their reactions to the content of the formal presentations and their conversations with one another, many Institute participants revealed that they were more accustomed to thinking and talking about the "future" in short-range rather than long-range terms. Their ability to predict the short-term consequences of a mix of internal and external resources, institutional goals, personnel and programs and the way those consequences were rhetorically "packaged" (including delineations of student needs) determined the degree to which their innovation was deemed successful.

Many participants testified that the collegial environment was considerably less supportive of risk-takers who tried being responsive to longer range factors, who tried comprehending, justifying and acting on the basis of predictions about large-scale societal or international developments. The participants' questions reflected this press of the present. They wanted to share the mechanics of innovation What worked? When? How were the faculty, students, administrators, trustees persuaded to accept the innovation? Funding sources? Cost savings? Many expressed an interest in a longer range view and admitted that if such concerns were easier to grasp and more malleable, and if the environment was more supportive of risk-takers, they would be more enthusiastic about the kind of long-range planning Donald Michael advocated.

We learned that while participants recognized that programmatic innovations require different mixes of resources during different phases of their life cycle, they were also painfully aware that tight financial resources within the institution often impede providing critical support services. Consequently, many innovations wither and die because institutions are not able to meet the changing resource

needs of the innovation. Reversing this pattern, particularly in this time of retrenchment, will not be easy. Participants shared Joseph Cosand's concern that institutions provide means within their structure for giving tangible and intangible supports for innovation. An "innovation fund" and a "Dean for Innovation" were two organizational mechanisms suggested. An institutional environment supportive of the risk-taker must be maintained at all costs. And it is clear that the costs can be high--especially the psychic costs incurred by innovators. In a series of personal "horror stories", the participants revealed the agony of initiating, implementing, and sustaining innovation in non-supportive environments. The conflict between the collegial, bureaucratic and democratic modes of decision-making and the various stages of innovation was emphasized repeatedly. Participants who had to struggle to implement and sustain their innovations looked with envy at programs which functioned because of what their representatives termed "benign neglect" by the rest of the institution--especially programs serving older students at off-campus sites.

One inevitable outcome of an intense week is that certain expressions gain broad currency during the time spent together. One such idiom was the metaphorical allusion to "reinventing the wheel." The need for ownership and uniqueness being what it is, especially among academics, some reinventing cannot be avoided. But what is to be avoided is the process of reinventing without a sense of history. Scenarios of what to expect on the basis of past experience must be shared broadly and must be constantly re-evaluated. The organization and interpersonal support structures for undertaking this sharing and doing it effectively are just beginning to be understood.

Support of innovation and innovators must also come from outside the institution. There is a paucity of networks linking innovators and innovations across the country. Strategies for Change and the Union for Experimenting Colleges and Universities are formal consortia concerned with innovation. NEXUS, the linking service of AAHE, is a more informal, user-stimulated service. Private foundations have sponsored a wide variety of efforts seeking to bring innovators together, this Institute being one, but these have been sporadic and certainly ill-coordinated. Too few opportunities have been provided for critique of innovation over the long run, for learning from exemplary program successes, and from program failures (the AAHE "creative failures" exchange is a good beginning). Even in the safe confines of the Institute, participants proved surprisingly reluctant to talk about mistakes. While several "bombs" were openly shared, there was little beyond the questions seeking facts about how the program was corrected, whether the innovator stayed at the institution, etc.

In thinking back over our week together, we found evidence that initiators, implementers and critics, indeed those most concerned about the present and future direction of their institution, can find a kind of austere comfort and security. The Institute went through its own cycle, as one of the participants put it

> ". . . from a degree of muddle through enthusiasm and real excitement, to more moderated excitement as we learned more particular details, to a sense that most of the innovations are trivial tinkering, to a kind of calm of mind and acceptance not just of uncertainty but of the transience of it all."

Some, perhaps most, of our colleagues in higher education might find this existential view disconcerting, even downright negative. We do not. Most of us seek the security of eternal truths and find reassurance in the idea of belonging to an harmonious institutional community. The challenge inherent in the knowledge explosion and the presence of nontraditional members in our community are threatening to many. Although societal forces will continue to buffet our institutions and our psyches, it seems unlikely that we or the academy will be torn apart. Our eternal truths will be challenged and many will undoubtedly fall. A universal theory of change seems unrealizable in this turbulent environment. A more reasonable, modest conclusion would recognize that the best we can do is to accept the "uncertainty" and "transience" of our situation and then resolve to reform our institutions to cope with it.